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US2003109695-A1.
                                                                                                                                                                                                                                                       the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                               AAD60939;
                                                                                                                                                                                                                                                                                                                                                              RESULT 161
                                                                                                                                                                                                                                                                                                                                                                        AAD60939
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                                                0;
treatment with respect to stenosis of a coronary artery or bypass graft
                                                Gaps
                                                                                                                                                                                      ss; primer; cytostatic; antidiabetic; anorectic; cerebroprotective; neuroprotective; antiinflammatory; gene therapy; antisense therapy; thyronimetic; NOVX; pathology; cancer; diabetes; obesity; endocrine disorder; CNS disorder; inflammatory disorder; chromosome mapping; tissue typing; predictive medicine.
                                                ö
                               1.0%; Score 16.6; DB 1; Length 24; 82.6%; Pred. No. 3.8e+02; tive 0; Mismatches 4; Indels
                                                                                                                                                                        Human NOVX polypeptide gene reverse primer SEQ ID NO: 537.
                Sequence 24 BP; 3 A; 6 C; 6 G; 9 T; 0 U; 0 Other;
                                                                848 ACCTGGACAAGGACCTGAAGCAG 870
                                                                              ACCTGGACAAGAGTCTAAAGCAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001US-0337477P.
2001US-0341562P.
2002US-0358656P.
2002US-0359122P.
2002US-0358978P.
                                                                                                                        ADC10518 standard; DNA; 24 BP
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2001US-0299133P.
2001US-0299230P.
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2001US-0300177P.
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2001US-0301550P.
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2002US-0359035P.
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2001US-0298285P.
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                                                                                                                                                                                                                                                                                        2002WO-US017443
                                                                                                                                                         (first entry)
                                         Local Similarity 82.6
nes 19; Conservative
                                                                                                                                                                                                                                                        WO2003000842-A2
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14-DEC-2001;
21-FEB-2002;
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22-FEB-2002;
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                                                                                                                                                                                                                                          Homo sapiens,
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                                                                                                                                                         18-DEC-2003
                                                                                                                                                                                                                                                                        03-JAN-2003
                                                                                                                                         ADC10518;
                                                                                23
                                 Query Match
                                                                                                          RESULT 160
                                                Matches
                                                                                                                  ADC10518
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated NOVX polypeptides and nucleic acid molecules useful for treating, preventing and diagnosing pathological conditions with NOVX-associated disorders, such as cancer, obesity, diabetes and inflammatory or CNS diseases.
                                                                                                                                                 Kekuda R;
                                                                  Agee ML, Anderson DW, Berghs C, Casman SJ, Catterton E;
Dipippo VA, Edinger SR, Eisen A, Ellerman K, Gangolli EA;
Gerlach VL, Gorman L, Guo X, Herrmann U, Hjalt T, Ji W, Kekuda R
Khramtsov NV, Li L, Liu X, Malyankar UM, Miller CE, Millet I;
Ort T, Padigaru M, Patturajan M, Pena CEA, Rastelli L, Rieger DK;
Rothenberg ME, Shenoy SG, Shinkets RA, Smithson G, Spaderna SK;
Spytek KA, Stone DJ, Vernet CAM, Zhong H, Zhong M, Alsobrook JP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.0%; Score 16.6; DB 1; Length 24; 82.6%; Pred. No. 3.8e+02; ative 0; Mismatches 4; Indels
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autoimmune disease; neurological disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 24 BP; 10 A; 3 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example B; SEQ ID NO 537; 772pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               959 GGCAGAAGGTGCTACACCGAGAC 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 ggaagaaggrgarrcacagagac 23
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17-AUG-1999; 99US-00375926.
31-JUL-2000; 2000US-00629609.
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Best Local Similarity 82.v.
Thes 19; Conservative
                                                                                                                                                                                                                                                                                                                                          Burgess CE, Lepley DM;
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(CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-210149/20.
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The present sequence is that of primer EV976, which was used with primer EV1333 (see ACF05114) in the PCR amplification of a 171 bp fragment corresponding to the 3' end of the long terminal repeats (LTR) of retrovarial vector pEV731. The amplified fragment was used as a probe for genomic DNA extracted from Jurkat cells infected with viral particles containing the HIV-derived vector LTR-Tat-IRES-GFP. The invention provides isolated cells that harbour a latent immunodeficiency virus that is transcription competent, that can be reactivated, and that is an in virtor model for latent HIV infection in vivo. The cells are useful for investigating that activate latent HIV. Such agents are useful for reducing the reservoir of latent HIV. Such agents are useful for
immunodeficiency virus e.g. HIV-1, or immunodeficiency virus-based retroviral vector integrated into its genome, useful for identifying latent HIV activators.
                                                                                                            Example 1; Page 32; 71pp; English
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Sequence 23 BP; 8 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

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Gaps
                                 ;
1.0%; Score 16.6; DB 1; Length 23; 32.6%; Pred. No. 3.6e+02; lve 0; Mismatches 4; Indels
                82.68;
                               Conservative
             Local Similarity
les 19; Conserv
Query Match
                              Matches
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1051 GCCAAGTCAATCCCAACAAGAC 1073 GCTAATTCACTCCCAACGAGAC 23 g

AAA07024 standard; DNA; 24 BP RESULT 158 AAA07024 

AAA07024;

(first entry) 03-JUL-2000

KSR PCR primer, SEQ ID NO:21.

KSR; kinase supressor of ras; CAP kinase; phosphorylation; ceramide-activated protein kinase; lipopolysaccharide; LPS; endotoxin; sphingomyelin signal transduction pathway; mutagenic; PCR primer; ss.

Mus sp.

US6040149-A.

21-MAR-2000.

97US-00785247. 10-JAN-1997; 96US-0009900P. 11-JAN-1996;

(SLOK ) SLOAN KETTERING INST CANCER RES.

Zhang Y, Liu J, Kolesnick RN;

WPI; 2000-270133/23.

lipopolysaccharide induced threomine phosphorylation by a ceramide-activated protein kinase. Novel method of identifying agents capable of inhibiting

Example VII; Col 57; 84pp; English.

The invention relates to a novel method of determining whether an agent is capable of specifically inhibiting the ability of a ceramide-activated protein (CAP) kinase to phosphorylate the threonine residue in a polypeptide containing a Thr-Pro- or Thr-Leu-Pro motif. In particular, the peptide substrate that is specifically phosphorylated is Raf-1, epidermal growth factor receptor (EGFR), or suitable fragments thereof. The CAP kinase is membrane bound and has an apparent molecular weight of

transduction pathway which uses ceramide as a second messenger. This pathway is initiated by tumour necrosis factor-alpha (TNF-alpha) and interest interest (IL-beta), causing the hydrolysis of sphingomyelin to ceramide. The ceramide in turn stimulates the kinase to phosphorylate protein substrates which can then mediate signal transduction. The CAP kinase is also stimulated by the bacterial endorcxin lippoolysaccharide (LPS), which is thought to mind the second messenger function of ceramide. The methods are useful for identifying agents that inhibit lippoolyyaaccharide-induced Thr phosphorylation by CAP kinase. The agents identified using the method are useful for treating disorders associated with aberrant phosphorylation of target molecules by CAP kinase, e.g., with aberrant phosphorylation of target molecules by CAP kinase, e.g., with aberrant phosphorylation of target molecules by CAP kinase, e.g., colificammatory disorders (such as rheumatoid arthritis), ulcerative colitis, graft versus host disease, lupus erythematosus, HIV, infection, disorders associated with poor stem cell prowth, and septic shock. the present invention to generate mutant Flag peptide/murine KSR (kinase supressor of ras) sequences via overlap extension PCR. KSR is a homologue 100-110 kD. It is an upstream participant in a sphingomyelin signal of CAP kinase \$

Sequence 24 BP; 6 A; 8 C; 7 G; 3 T; 0 U; 0 Other;

Gaps .. 1.0%; Score 16.6; DB 1; Length 24; 82.6%; Pred. No. 3.8e+02; 4; Indels 0; Mismatches 19; Conservative Local Similarity Query Match **latches** 

0

ð g

.; 0

AAF64165 standard; DNA; 24 AAF64165; AAF64165/

(first entry) 06-APR-2001

Primer #105.

Human; lipoprotein lipase; LPL; stenosis; ss.

WO200102606-A2. Homo sapiens, 11-JAN-2001. 

(CEDA-) CEDARS SINAI MEDICAL CENT.

99US-00347114.

02-JUL-1999;

30-JUN-2000; 2000WO-US018308

Yang H; Rotter J, Schenner M, Taylor KD,

WPI; 2001-138155/14.

Genetic testing for determining non-responsiveness to statin drug in patients of a coronary artery disease, involves analyzing amplification products for homozygosity for a variant allele in the human lipoprotein lipase gene.

Example 5; Page 26; 74pp; English.

The present invention relates to detecting a genetic predisposition in a human subject for non-responsiveness to statin drug treatment, involving amplifying nucleic acids including a non-coding or untranslated region within the 3' and of the human lipoprotein lipase (LPL) gene from a tissue sample. The method is useful for determining which patients suffering from coronary artery disease, or which coronary artery bypass graft (CABG) patients, will likely not respond positively to statin drug

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel human GTI (hGTI) transcription factor gene with neuroleptic activity containing a transcribed polymorphic CAG repeat. Allelic variants of the hGTI gene CAG repeat are associated with schizophrenia, affective disorders (especially manic depression) neurodevelopmental brain diseases or with phenotypic variability with respect to long term response to neuroleptic medication. Short (171-177 pp.) allelic variants of CAG repeats in the hGTI gene, are indicative of non-severe schizophrenia and neuroleptic response in patients. Probes and/or primers designed using the hGTI gene can be used to identify genes interacting with a biochemical pathway affected by the hGTI gene. The identified gene role can be evaluated in psychiatric patients. Therapeutic agents can be identified by administering the agent to a transgenic mammial (or schizophrenic) patients) and evaluating the
                                       Polymorphic CAG repeat; hCTl; diagnosis; prognosis; schizophrenia; human; transcription factor; neuroleptic activity; affective disorder; manic depression; neurodevelopmental brain disease; detection; phenotypic variability; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A human GT1 gene containing a transcribed polymorphic CAG repeat, useful in the diagnosis and treatment of schizophrenia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MAP-kinase-kinase; LMMKK; diagnosis; treatment; leishmaniasis; disease; parasite; protozoal infection; vaccine; PCR primer; ss.
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ilarity 82.6%; Pred. No. 3.6e+02;
Conservative 0; Mismarcho.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 16; 41pp; English.
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                                                                                                                                                                                                                                                                                                                98WO-CA000884.
                                                                                                                                                                                                                                                                                                                                                          97CA-02216057
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  Human hGT1 PCR primer 1.
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                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                   18-SEP-1998;
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                                                                                                                                                         Synthetic
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This invention describes a novel use of nucleic acid (I) that encodes disphanaia kinases (II) for identification and preparation of agents for diagnosis, treatment and/or prevention of leishmaniasis. The invention also describes (a) use of (II) for identifying and producing agents for diagnosis, treatment and/or prevention of leishmaniasis; (b) antibodies (Ab) directed against (II); and (c) Leishmania mutants in which as least one gane (I) is inactivated. (II) are essential for differentiation and replication of the parasites, so are targets for development of specific inhibitors. Mutants defective in (II) induce an immune response but do not cause disease. (I) and (II) are useful for identifying and preparing agents for diagnosis, treatment and/or prevention of protozoal infections, particularly leishmaniasis. (I), (II) and (II)-specific antibodies may themselves be used for diagnosis and treatment. Leishmania mutants that are unable to express at least one (II) are useful as live
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                Use of nucleic acid encoding Leishmania kinases for identifying and preparing diagnostic, preventative and therapeutic agents.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 23 BP; 7 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                  (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Retroviral vector pEV731 PCR primer EV976.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   994 AACCIGCICAICAACGAGGGG 1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 AACCTGCTCATCAGCGAAACTGG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1.7; Page 69; 98pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-DEC-2001; 2001US-0341727P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-DEC-2002; 2002WO-US040698
99DE-01039070.
                                                                       99DE-01013905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACF05113 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-NOV-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 1.0
Best Local Similarity 82.6
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (REGC ) UNIV CALIFORNIA
                                                                                                                                                                                                                                                                                    WPI; 2000-619872/60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-577369/54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2003054160-A2
18-AUG-1999;
                                                                       26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Retrovirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jerdin E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACF05113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     vaccines
                                                                                                                                                                                                                 Wiese M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACF05113
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BP.

(first entry)

(revised)

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Vector; pVAC1; pRc/RSV; leader sequence; termination signal; PCR; flusion protein; pSfi/Not.Tag1; pelB leader; human; immunoglobulin; VH1; single chain; FV; murine antibody; retroviral; envelope; amplify; plasmid; vaccine; polymerae chain reaction; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modulating immune response to a disease marker - by administering a vector which expresses the disease marker to interact with the immune
                                                                                                                                                                                                                                                                                                                                                                                                                               Hawkins RE, Russell SJ, Stevenson FK,
                                                                                                                                                   Vector pVAC1 construction primer #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 33; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                    (MEDI-) MEDICAL RES COUNCIL.
                                             AAQ62402 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1994-135575/16.
                                                                                                                                                                                                                                                                                 WO9408008-A1
                                                                                                                                                                                                                                                                                                                                           04-OCT-1993;
                                                                                                                                                                                                                                                                                                                                                                       02-OCT-1992;
                                                                                                         25-MAR-2003
                                                                                                                                                                                                                                                                                                              14-APR-1994.
                                                                                                                      18-NOV-1994
                                                                                                                                                                                                                                                     Synthetic.
                                                                            AAQ62402;
                   RESULT 154
                                 AAQ62402
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence is a sequencing primer for Human Leukocyte Antigen (HLA) class I gene. The HLA class I genes are found on chromosome 6p21.3. HLA class I proteins are found on the surface of almost all nucleated cells and are involved in antigen presentation to immune system cells. This primer can be used to type HLA class I genes: by carrying out PCR on a sample DNA, comprising HLA class I gene, and detecting the amplicon formed using a sequence. Specific detection method e.g. DNA sequencing discriminating among the HLA-B, HLA-B, and HLA-C genes and other related class I genes and pseudogenes. In addition, the present sequence is useful for casen transplantation studies, for the study of autoimmune disease and for the determination of susceptibility to infectious disease
             disease and for the determination of susceptibility to infectious disease
                                                                                                                                                                                                                                                                                                                                                 Human Leukocyte Antigen class I; HLA-A; antigen presentation; HLA typing; organ transplantation; autoimmune disease; sequencing primer; infectious disease susceptibility; chromosome 6p21.3; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Typing HLA class I genes for organ transplantation, involves contacting the sample DNA containing HLA class I gene comprising two exons and a target sequence, with amplification primers and detecting the amplicon.
 organ transplantation studies, for the study of autoimmune
                                                                                                       Gaps
                                                                                                       0;
                                                                      Query Match 1.0%; Score 16.8; DB 1; Length 21; Best Local Similarity 90.0%; Pred. No. 3.1e+02; Matches 18; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.0%; Score 16.8; DB 1; Length 21; 90.0%; Pred. No. 3.1e+02; Live 0; Mismatches 2; Indels
                                       BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chadwick RB;
                                                                                                                                                                                                                                                                                                                      HLA class I gene sequencing primer #9.
                                                                                                                               352 GGGTCTGATGGGGAGAGTGA 371
                                                                                                                                                  21 GGGTCTGATGGGAAGAGTCA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 10; Col 35; 60pp; English.
                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95US-00538666.
                                                                                                                                                                                                                                  AAA90559 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Parham P, Johnston-Dow L,
                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (PEKE ) PERKIN-ELMER CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 90.09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-542544/49.
                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-FEB-1995;
                                         Sequence 21
                                                                                                                                                                                                                                                                                           11-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                          US6103465-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-AUG-2000.
useful for
                                                                                                                                                                                                                                                              AAA90559;
                                                                                                                                                                                                       RESULT 153
AAA90559/c
8 X G G
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Winter GP;

93WO-GB002054. 92GB-00020808.

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The sequences given in AAQ62395-449 are primers which were used in the construction of the vector pVACI. This vector is based on the commercially available vector pRc/RSV. Leader sequences and termination signals were introduced into the vector to allow for production of fusion proteins. The vector, pSfi/Not.Tagl, was modified to replace the pelB eleader with the human immunoglobulin VHI leader sequence that permits the encoding of an Sfi cloning site without modification of the amino acid sequence. This fragment was then cloned as an BCoRI/Blunt-HindIII fragment into NotI/Blunt-HindIII cut vector pRc/RSV to give pVACI. The single chain FV for an individual patient can be inserted within the VHI
                                                                                                                                                                                                                                                                                                                                                   leader sequence. This plasmid when encoding a single chain murine antibody/retroviral envelope fusion procein can be used as a plasmid vaccine and it induces a strong humoral response to the antibody moiety in BALB/c mice. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.0%; Score 16.6; DB 1; Length 23; 82.6%; Pred. No. 3.6e+02; tive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 23 BP; 5 A; 4 C; 10 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1269 TGAGGACGTGGCCAGGCATCC 1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX23985 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 1.0
Best Local Similarity 82.6
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX23985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 155
AAX23985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 X Z X 1 X
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Gaps

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GGGTCTGATGGGGAGAGTGA 371

352

à 8

GGGTCTGATGGGAAGAGTCA 2

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Amplification and sequencing primers specific for HLA class 1 genes useful for locus specific nucleic acid amplification for HLA typing.
                                                                                                                                                                                                                                                                                                                                                                  Johnston-Dow L, Chadwick RB,
                                                                                                                                                                                                                                                                                                                                                       (PEKE ) PERKIN-ELMER CORP
                         (PEKE ) PERKIN-ELMER CORP
                                                                                                                                                                                                                                                                                                                                                                            WPI; 1997-435175/40.
                                              WPI; 1997-435175/40.
                                                                                                                                                                            Local Similarity
es 18; Conserv
                                                                                                                                                                                                                                                                                                                                             20-FEB-1996;
                                                                                                                                                                                                                                                                                                   Homo sapiens
     20-FEB-1996;
               20-FEB-1996;
                                                                                                                                                                                                                                                                                                             WO9731126-A1
                                                                                                                                                                                                                                                                                                                        28-AUG-1997.
                                                                                                                                                                                                                                                         02-APR-1998
                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                              AAT95004;
                                                                                                                                                                        Query Match
                                                                                                                                                                                                                              AAT95004/c
                                                                                                                                                                                                                         RESULT 151
                                                                                                                                                                                   Matches
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Parham P;

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The present sequence is a sequencing primer for Human Leukocyte Antigen (HLA) class I gene. The HLA class I genes are found on chromosome 6p21.3. HLA class I proteins are found on the surface of almost all nucleated cells and are involved in antigen presentation to immune system cells. This primer can be used to type HLA class I genes: by carrying out PCR on a sample DNA, comprising HLA class I gene, and detecting the amplicon formed using a sequence-specific detection method e.g. DNA sequencing (using the present sequence). The present sequence is useful for discriminating among the HLA-A, HLA-B, and HLA-C genes and other related class I genes and pseudogenes. In addition, the present sequence is
                                                               The present sequencing primer was used to sequence PCR amplified human leukocyte antigen (HLA) class I genes. The primer is designed to sequence the antisense strand of exan 4, from the 5 exon-intron border. PCR primers were used for locus specific nucleic acid amplification for HLA typing. Typing HLA-A, -B or -C class I genes comprises providing a sample DNA containing a HLA-A, -B or -C class I gene saving a 1st and 2nd exon and a target sequence, contacting the sample DNA with an amplification primer including sequence complementary to sequence located in exon 1 of the HLA-A, -B or -C gene, and a second amplification primer sequence complementary to sequence located in exon 5 of the HLA-A, -B or -C gene. The PCR product is sequenced using the above primers and the determined DNA sequence compared with the DNA sequences of known HLA types
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human Leukocyte Antigen class I; HLA-A; antigen presentation; HLA typing; organ transplantation; autoimmune disease; sequencing primer; infectious disease susceptibility; chromosome 6p21.3; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Typing HIA class I genes for organ transplantation, involves contacting the sample DNA containing HIA class I gene comprising two exons and a target sequence, with amplification primers and detecting the amplicon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 90.0%; Pred. No. 3.1e+02;
Matches 18; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chadwick RB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HLA class I gene sequencing primer #3.
                      Claim 29; Page 62; 105pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        352 GGGTCTGATGGGGAGAGTGA 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 39; Col 38; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21 GGGTCTGATGGGAAGAGTCA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA90553 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95US-00538666.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-JAN-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (PEKE ) PERKIN-ELMER CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-542544/49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US6103465-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-AUG-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Parham P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAA90553;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA90553
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequencing primers AAT94987-92 were used to sequence PCR amplified human leukocyte antigen (HLA) class I genes. The primers are designed to hybridise to exon-intron borders of exons 2, 3 and 4 of the HLA genes. PCR primers were used for locus specific nucleic acid amplification for HLA typing. Typing HLA-A, -B or -C class I genes comprises providing a sample DNA containing a HLA-A, -B or -C class I gene having a 1st and 2nd exon and a target sequence, contacting the sample DNA with an amplification primer including sequence complementary to sequence located in exon 1 of the HLA-A, -B or -C gene, and a second amplification primer sequence complementary to sequence located in exon 5 of the HLA-A, -B or -C gene, and a second amplification primer equence complementary to sequence located in exon 5 of the HLA-A, -B or -C gene. The PCR product is sequenced using the above primers and the determined DNA sequence compared with the DNA sequences of known HLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                    Amplification and sequencing primers specific for HLA class I genes useful for locus specific nucleic acid amplification for HLA typing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Primer for sequencing exon 4 antisense strand of HLA class I genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human leukocyte antigen-C class I gene; HLA-C; exon 1; exon 5; locus specific nucleic acid amplification; HLA typing; exon 4; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.0%; Score 16.8; DB 1; Length 21; 90.0%; Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 4 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                Parham
                                                                                                                                                                                                                                                                                                                                                                                          Claim 10; Page 57; 105pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   352 GGGTCTGATGGGGAGAGTGA 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 GGGTCTGATGGGAAGAGTCA 2
                                                                                                                                                                                                Johnston-Dow L, Chadwick RB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96WO-US002408
                            96WO-US002408
                                                                                   96WO-US002408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT95004 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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Gaps

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The invention describes a new compound, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding CDK9, specifically hybridises with the nucleic acid encoding CDK9 comprising 7018-bp sequence and inhibits expression of CDK9. Also described are: inhibiting the expression of CDK9 in calls or tissues; screening for a modulator of CDK9; a diagnostic method for identifying a disease state; a kit or assay device comprising the compound; and treating an animal having a disease or condition associated with CDK9. The oligonuclectide compound is useful for preparing a composition for treating hyperproliferative disorder, e.g. cancer. This sequence represents a human cyclin-dependent kinase 9 (CDK9)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New oligonucleotide compound that inhibits expression of CDK9, useful for preparing a composition for treating hyperproliferative disorder, e.g.
  'note= "OTHER= Phosphorothioate backbone. All cytidines
                                                                                                                                                                               /note = "OTHER = 2'-O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                              note= "OTHER= 2'-0-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Primer 3 for sequencing of human leukocyte antigen class I genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human leukocyte antigen-C class I gene; HLA-C; exon 1; exon 5; locus specific nucleic acid amplification; HLA typing; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.0%; Score 16.8; DB 1; Length 20; 90.0%; Pred. No. 2.9e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 4 A; 8 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 15; 49pp; English
                      are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1030 GCTGACTTTGGCCTGGCCCG 1049
                                                                                                                                                                                                                                                                                                                                                                                                                      Dobie KW
                                                                              mod_base= OTHER
                                                                                                                                                            /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCAGACTTTGGGCTGGCCCG 1
                                                                                                                                                                                                                                                                                                  09-DEC-2002; 2002US-00315765.
                                                                                                                                                                                                                                                                                                                                       09-DEC-2002; 2002US-00315765.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT94989 standard; DNA; 21
                                                                                                                                            υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-APR-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense oligonucleotide
                                                                                                                 15. .20
/*tag= c
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                                                                                                                                                                                                                                                                                                                                                                                                                    Bennett CF, Freier SM,
                                                           *tag=
                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-440329/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                    US2004110140-A1
                                         modified base
                                                                                                                     modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9731126-A1
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                                                                                                                                                                                                                                                           10-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-AUG-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a compound targetted to a nucleic acid molecule encoding haematopoietic cell protein tyrosine kinase. The compound inhibits the expression of haematopoietic cell protein tyrosine kinase and it specifically hybridises with the nucleic acid molecule encoding the tyrosine kinase or with at least an 8-nucleobase portion of an active site on the nucleic acid molecule encoding the tyrosine kinase. The attiense compounds are useful for modulating the expression of haematopoietic cell protein tyrosine kinase and treating diseases or conditions associated with the expression of the tyrosine kinase, such as hyperproliferative disorders (e.g. cancer), inflammation, diabetes or a viral infection. The antisense compounds are also useful for diagnostics, the expression or tumour formation, as research reagents and kits and in distinguishing between functions of various members of a biological pathway. The present sequence is human haematopoietic cell tyrosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
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                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides targeted to nucleic acids encoding hematopoietic cell protein tyrosine kinase, useful for diagnosing or treating cancer (e.g. leukemia), inflammation, diabetes or viral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
              /mod_base= OTHER
/note= "2'-0-methoxyethyl (2'-MOE) nucleotides"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.0%; Score 16.8; DB 1; Length 20; 90.0%; Pred. No. 2.9e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic; gene therapy; CDK9; cyclin dependent kinase 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human CDK9 antisense oligonucleotide seqid 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 15; Page 26; 59pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 kinase antisense oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mod_base= OTHER
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                                                                                                                                                        04-DEC-2001; 2001US-00007010.
                                                                                                                                                                                               04-DEC-2001; 2001US-00007010.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADP74230 standard; DNA; 20
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/*tag= c
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                                                                                                                                                                                                                                                                          Borchers AH, Dobie KW;
                                                                                                                                                                                                                                    PHARM INC
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Best Local Similarity
Matches 18; Conserva
                                                                                                                                                                                                                                                                                                                 WPI; 2003-811000/76.
                                                                          US2003125275-A1
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modified_base
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                                                                                                                 03-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                    infections.
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The sequence represents a human mammary gland enriched chemokine (WEC) sense primer. The primer was used in the invention to generate a fragment encompassing the entire coding region of MEC. The invention relates to a novel method for regulating a tumour or adverse bodily reaction, comprising providing a therapeutic composition having a mammary gland chemokine polypeptide. The polypeptide of the invention has cytostatic and antiinflammatory activity. The method of the invention is useful for regulating a tumour or adverse bodily reaction. The invention also provides a method useful for detecting a tumour using a probe comprising the polymucleotide or an antibody to the MEC. The adverse bodily
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; NOVX; neurodegenerative disease; Alzheimer's disease; anxiety; Parkinson's disease; Huntington's disease; neurological disorder; schizophenia; manic depression; mental retardation; angina pectoris; cardiovascular disease; acute heart failure; myocardial infarction; muscular disease; muscular disorder; retinal disease; photoreception; deafness; keratinisation disorder; cancer; ovarian cancer; melanoma; immunological disorder; inflammatory disease; immune disease; diabetes; bacterial infection; fungal infection; protozoal infection; obesity; viral infection; reproductive system disorder; metabolic disturbance; anorexia; wasting disorder; chronic disease; infectious disease; dyslipidaemia; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DW, Burgess CE, Boldog FL, Casman SJ;
Ellerman K, Gerlach V, Gorman L, Grosse WM;
kuda R, Lepley DM, Li L, Macdougall JR;
Asstelli L, Rieger DK, Shimkets RA;
Stone DJ, Tchernev VT, Vernet CAM, Voss EZ;
                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                            1.0%; Score 17; DB 1; Length 26; 80.0%; Pred. No. 3.4e+02;
                                                                                                                                                                                                                                                                                                                                                     5; Indels
                                                                                                                                                                                                                                                                       Sequence 26 BP; 4 A; 6 C; 10 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                    reactions include cancer and inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alsobrook JP, Anderson, Ellerman SD, Edinger SK, Ellerman SD, Edwar R, Lepler Guo X, Herrmann JL, Kekuda R, Lepler Millet I, Pena CEA, Peyman JA, Rast Smithson G, Spytek KA, Stone DJ, Transhinson G, Spytek KA, Stone DJ, Transhinson G, Shong H, Zhong M;
                                                                                                                                                                                                                                                                                                                                                                                            941 GCCTGGCCTACTGCCACCGGCAGAA 965
                                                                                                                                                                                                                                                                                                                                                                                                                                 26 gccreccracracracracracaca 2
Disclosure; Page 5; 11pp; English.
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2001US-0291037P.
2001US-0297173P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-DEC-2001; 2001WO-US048369.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-AUG-2001; 2001US-0315639P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-OCT-2001; 2001US-0326393P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABS64424 standard; DNA; 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-NOV-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                     20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human NOVX probe Ag2492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200264791-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABS64424;
                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 147
                                                                                                                                                                                                                                                                                                                                                       Matches
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purputation and minimized are useful in maintacetter of the prevention of the medicament for treating or preventing neurodegenerative diseases (e.g. Alzheimer's disease, Parkinson's disease, or Huntington's disease), contentodical disorders (e.g. anxiety, schizophrenia, manic depression or mental retardation), cardiovascular disease (e.g. acute heart failure, angina pectoris or myocardial infarction), muscular diseases and disorders, including those involving photoreception, deafness and keratinisation disorders), cancer (e.g. ovarian cancer or melanoma), immunological disorders, inflammatory and immune diseases, bacterial, fungal, protozoal and viral infections, and reproductive system disorders that proteins of the invention may be used to screen care disorders that modulate the NoVX protein activity or expression, as well as to treat disorders characterised by insufficient or excessive consumption of NoVX protein forms that have decreased or aberrant activity compared to NoVX wild type protein, such as diabetes, obesity, metabolic disturbances associated with obesity, anorexia and various diseases and various cancers, infectious diseases and various dyallpidaemias. The mucleic acid an individual from minute biological samples (tissue typing), and in correct represents a probe that was used in the methods of the invention correct correct correction of a biological sample. The present mucleic acid cardered corrections of the was used in the methods of the invention correction of a probe that was used in the methods of the invention correction of the decrease of the invention of a biological sample. The present mucleic acid cardered corrections decreased and the machod and the methods of the invention correction of a biological sample. The present mucleic acid cardered 
                                                                                                                                                                                             The present invention relates to new NOVX polypeptides. The polypeptides, polynucleotides and antibodies are useful in the manufacture of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Haematopoietic cell; tyrosine kinase; hyperproliferative disorder; cancer; therapy; inflammation; diabetes; viral infection; inflammation; tumour; cytostatic; virucide; antisense therapy; antisense; human; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "Phosphorothioate backbone; All cytidines are 5-methyl cytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human haematopoietic cell tyrosine kinase antisense oligo ISIS #150763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
             New NOVX polypeptides and polynucleotides useful for treating or preventing e.g. neurodegenerative diseases, neurological disorders, cardiovascular diseases and disorders, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.0%; Score 17; DB 1; Length 26; 80.0%; Pred. No. 3.4e+02; Wienstrhes 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 26 BP; 10 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               767 TCAAGGACCTCAAACACGCCAACAT 791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 reaacccraaaccacccaacar 26
                                                                                                                                               Example 2; Page 247; 299pp; English.
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/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAD62208 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-JAN-2004 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 1.09
Best Local Similarity 80.09
Matches 20; Conservative
                                                                                                 immunological diseases.
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modified base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAD62208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 148
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/note= "2'-0-methoxyethyl (2'-MOE) nucleotides" 16. .20

/mod base= OTHER

modified base

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10017621-381.rng

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13-MAY-2004.
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ABA99030/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in analysis of genetic variation or in hybridisation to a DNA library, compounds. The nucleic acid probes are specifically designed for analysis compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid states and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid further comprises a tag sequence or specific comparison of any gene, in mapping the 5' termini of mRNA molecules by primer extensions of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening segments of DNA that have been to primer extensions or in screening segments of DNA that have been concluded and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence and probes incorporated in the microarray. Note: The sequence are given uspto.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                    New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR, primer; beta-B1-crystallin; beta-crystalline; golden hamster; cing abnormality; miscarriage; eye ball abnormality;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.0%; Score 17; DB 1; Length 25;
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0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 25 BP; 7 A; 11 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Golden hamster beta-B1-crystallin PCR primer #6.
                                                                                                                                                                                                                sequence or specific mutations of any gene.
                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 128708; 9pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    232 GGTGGTGGTGGCGCAGTGACCCTG 256
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                                                   15-MAR-2002; 2002US-00098263.
                                                                             16-MAR-2001; 2001US-0276759P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity ov.
There 20; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hereditary myocardosis.
                                                                                                      (AFFY-) AFFYMETRIX INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mesocricetus auratus.
                                                                                                                                                         WPI; 2003-567953/53.
US2003104410-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JP2004135620-A.
                                                                                                                                 Mittmann MP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-AUG-2004
                        05-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ss; PCR;
splicing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADP22684;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 145
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à
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New (beta)-crystalline DNA of a normal golden hamster, useful for treating or preventing various diseases resulting from the abnormality of splicing (e.g., miscarriage).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a DNA encoding beta-crystalline of a normal golden hamster. The DNA is useful for treating or preventing various disease resulting from the abnormality of splicing (e.g., miscarriage), and to elucidate the cause of the abnormality in the eye ball BIO14.6 hamster which is a model animal of hereditary myocardosis. The DNA enables the elucidation of the cause of the abnormality in eye ball hamster, an molecular machinery related to splicing of the gene in generating mature mRNA. The present sequence represents a golden hamster
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; MEC; mammary gland enriched chemokine; chemokine; tumour; cancer; cytostatic; antiinflammatory; inflammation; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Regulating tumor or adverse bodily reaction, involves providing therapeutic composition comprising a mammary gland chemokine, and providing the composition to the tumor or to the area of adverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.0%; Score 17; DB 1; Length 25;
80.0%; Pred. No. 3.3e+02;
wiemarches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human mammary gland enriched chemokine sense primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 25 BP; 5 A; 7 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                   (DOKU-) DOKURITSU GYOSEI HOJIN KAGAKU GIJUTSU SH
                                                                                                                                                                                                                                                                                                                                                                                                              Example 4; SEQ ID NO 17; 39pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       750 CCGGGAAGIGICCCTGCTCAAGGAC 774
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         beta-B1-crystallin PCR primer.
21-OCT-2002; 2002JP-00305562.
                                                                21-OCT-2002; 2002JP-00305562.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABA99030 standard; DNA; 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-MAY-2002 (first entry)
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(MICK/) MICKANIN C S.
(BHAT/) BHATIA U.
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                                                                                                                                                                                                       WPI; 2004-360998/34.
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Matches 20; Conserv
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The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in manitoring gene expression levels by hybridisation to a DNA library, or a nanitoring gene expression levels by hybridisation to a DNA library, of a least one target sequence. The method of analysis comprises compounds. The nucleic acid probes are specifically designed for analysis of at least one or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dottorobes is useful in situ hybridisation, in Southern, Morthern or dottorobes are additional subclones containing sequence or specific mutations of any gene, in mapping the 5' termin of mRNA molecules by the primer extensions or in screening cDNA or genomic libraries or subclones contained in the microarray. Note: The sequence contained is one of the nucleic acid probes incorporated in the microarray. Note: The sequence of acid probes incorporated in the microarray. Note: The sequence of from inspired the probes incorporated in the microarray. Note: The sequence of from inspired in the microarray. Note: The sequence of from inspired in the microarray. Note: The sequence of from inspired in the microarray. Note: The sequence of acid probes incorporated in the microarray. Note: The sequence of the formal directly acid probes incorporated in the microarray.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 48152; 9pp; English.
                                                                                                                                                                                                                     15-MAR-2002; 2002US-00098263.
                                                                                                                                                                                                                                                                            16-MAR-2001; 2001US-0276759P.
  cross-species comparison
                                                                                                                                                                                                                                                                                                                                 (AFFY-) AFFYMETRIX INC
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                                                                                                         US2003104410-A1.
                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                         Mittmann MP;
                                                                                                                                                                05-JUN-2003
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Gaps . 1.0%; Score 17; DB 1; Length 25; 0.0%; Pred. No. 3.3e+02; 5; Indels Sequence 25 BP; 5 A; 2 C; 6 G; 12 T; 0 U; 0 Other; from USPTO at segdata.uspto.goc/sequence.html 80.0%; Pred. 10. 20; Conservative Local Similarity Best Loca Matches

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787 AACATCGTTACGCTACATGACATTA 811 25 AATAACGTCACACTACAAGACATTA 1 à

ACK02039 standard; DNA; 25 BP. (first entry) 14-OCT-2003 ACK02039; RESULT 143 ACK02039/c 

Human microarray DNA oligonucleotide SEQ ID NO 102020.

EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; cross-species comparison.

The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dotblot hybridisation to identify or detect the sequence or specific acid probes is useful in in situ hybridisation, in Southern, Northern or dotblot probes is useful in in situ hybridisation.

Contact the sequence of sequence or specific acid probes is useful in in situ hybridisation, in Southern, Northern or dotblot probes is useful in situ hybridisation of any gene, in mapping the 5' terminin of many gene, in accenning segments of DNA that have been solationed and previously sequence expensed presented is one of the nucleic acid probes in the microarray. Note one sequence nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at segdata.uspto.goc/sequence.html New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene. Gaps ·; 1.0%; Score 17; DB 1; Length 25; 80.0%; Pred. No. 3.38+02; ttive 0; Mismatches 5; Indels Sequence 25 BP; 5 A; 9 C; 4 G; 7 T; 0 U; 0 Other; Claim 1; SEQ ID NO 102020; 9pp; English. 391 TCGGATGAGGTGCAGTCTCCAGTGA 415 25 raccarcacarcacacarca 1 15-MAR-2002; 2002US-00098263. 16-MAR-2001; 2001US-0276759P Query Match
Best Local Similarity 80.0
Matches 20; Conservative (AFFY-) AFFYMETRIX INC. WPI; 2003-567953/53. US2003104410-A1 Homo sapiens Mittmann MP; 05-JUN-2003 ò

ACK28727 standard; DNA; 25 BP RESULT 144 ACK28727/

. 0

EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; Human microarray DNA oligonucleotide SEQ ID NO 128708. 14-OCT-2003 (first entry)

ACK28727;

cross-species comparison. 

Homo sapiens

10017621-381.rng

(first entry)

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Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ1; MDZ1; MDZ1; chromosome 7q22.1; chromosome 6p21.3-22.3; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                          Human MDZ7 scanning oligonucleotide SEQ ID 4800.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 8; SEQ ID NO 4800; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                             30-JUL-2002; 2002EP-00016874.
                                                                                                                                                                                                                                                                                                                                                                                                                      02-AUG-2001; 2001US-00922181.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-423107/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                         EP1281758-A2.
                                                                                                                                                                                                                                              Homo sapiens
                                               20-NOV-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shannon M,
    ADB03814;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is proteins and their coding sequences: MD23, MD24, MD27, MD213. MD23 is encoded at chromosome fg21.3-22.2, MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome 15q26.1. The MD23, MD24, MD24, MD212 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23, MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic acids can also be used as probes to detect and characterize gross alterations in MD23, MD27, or MD212. The probes are
                                                                                                                                                                                                                                                                                                       Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ1; MDZ12; chromosome 7g22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             present invention relates to novel human zinc finger-containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1/; ____Pred. No. 3.3e+02;
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                                                                                                                                                                                                                                                                Human MDZ7 scanning oligonucleotide SEQ ID 4802.
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CTGTTCCCGCTGCCCTCGGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MDZ4, MDZ7 or MDZ12, e.g. cancer.
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                                                                                                                                 ADB03816 standard; DNA; 25
                                                                                                                                                                                                                     (first entry)
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                                                                                                                                                                            ADB03816;
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Gu Y, Nguyen C;

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The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is concoded at chromosome 6p21.3-22.2, MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome cor in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23. MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic cards and proteins are also useful for diagnosing or monitoring a disease cards can also be used as probes to detect and characterize gross alterations in MD23, MD24, MD27, or MD212, e.g. caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic acids can also be used as probes to detect and characterize gross alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as the present sequence was used to illustrate the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 25;
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30.0%; Pred. No. 3.3e+02;
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Les 20; Conserv
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Gaps

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0; Mismatches

80.08;

Local Similarity 80.0 nes 20; Conservative

Best

923 TGTTCCAGCTGCTCCGTGGCCTGGC 947

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ADB03814 standard; DNA; 25 BP

RESULT 141 ADB03814 ID ADB0 XX

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Sequence 25 BP; 5 A; 4 C; 7 G; 9 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCR primers 236748-49 were used to amplify GenBank accession number represents a target for the method of the invention. The amplified sequence represents a target for the method of the invention. The specification describes a method for measuring the level of two or more nucleic action molecules in a target. The method comprises contacting a probe with an arbitrarily or statistically sampled target and detecting the amount of specific binding of the target to the probe. The methods can be used to identify differentially expressed nucleic acid molecules associated with disease states, such as cancer, autoimmune disease, infectious disease, adjing, developmental disorder, proliferative disorder or neurological disorder. Alternatively the methods can be used to assess the efficacy or toxicity of or a resistance to a treatment. Also the methods can be used to determine differential expression of nucleic acid molecules in
conjunctival scarring) or a hyperproliferative disease or condition (e.g. cancer), or in inhibiting the growth of a tumour. This sequence represents a human JNK2 oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               response to a stimulus, e.g. a chemical, drug or growth factor (especially epidermal growth factor), radiation, stress or a pathogen. The methods can also be used to determine co-regulated genes that can be potential targets for drug discovery.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     growth factor; epidermal growth factor; radiation; stress; pathogen; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Measuring expression of low abundance reduced complexity target nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stimulus-regulated nucleic acid; sequence profile; nucleic acid level; differentially expressed nucleic acid; disease state; cancer; autoimmune disease; infectious diseases, aging; developmental disorder; proliferative disorder; neurological disorder; toxicity; PCR primer; treatment resistance; differential expression; drug discovery;
                                                                                                                                                                Gaps
                                                                                                                                                                ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR primer used to amplify GenBank accession number H27389.
                                                                                                                     1.0%; Score 17; DB 1; Length 20;
100.0%; Pred. No. 2.7e+02;
ive 0; Mismatches 0; Indels
                                                                                 Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Welsh J, Trenkle T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 3; Page 96; 187pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CANCER CENT SIDNEY.
                                                                                                                                                                                                        1033 GACTITGGCCTGGCCCG 1049
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98US-0098070P.
99US-0118624P.
                                                                                                                                                                                                                                                                                                                                                   AAZ36748 standard; DNA; 25 BP.
                                                                                                                                                                                                                                               1 cacrireccreecee 17
                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                            Best Local Similarity 100.
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             acid molecules.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (KIMM-) KIMMEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mcclelland M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
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04-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                    13-MAR-2000
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                                                                                                                         Query Match
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proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2, MD27 is encoded at chromosome 16p1.2 and MD212 is encoded at chromosome 15q26.1. The MD23, MD24, MD27, and MD212 is encoded at chromosome 15q26.1. The MD23, MD24, MD27, and MD212 is encoded at chromosome 15q26.1. The MD23, MD24, MD27, are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23, MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic acids can also be used as probes to detect and characterize gross alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are proteins are useful as therapeutic agents for gene therapy or as proteins are useful as therapeutic agents for gene therapy or as
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                                                                                                                                                                                                                                                                                                                                                                            Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ1; MDZ1; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to novel human zinc finger-containing
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                   Length 25;
                                                       Indels
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 1.0%; Score 17; DB 1; Ler
80.0%; Pred. No. 3.38+02;
                                                                                                                                                                                                                                                                                                                                            Human MDZ7 scanning oligonucleotide SEQ ID 4801.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 8; SEQ ID NO 4801; 103pp; English.
                                                                                               531 CAATAGCCCCATCTTTGACAAGCCC 555
                                                                                                                              25 cácradcagcarcrirdaaaagcac 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MDZ4, MDZ7 or MDZ12, e.g. cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JUL-2002; 2002EP-00016874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-AUG-2001; 2001US-00922181
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                                                                                                                                                                                                                               ADB03815 standard; DNA; 25
                                                                                                                                                                                                                                                                                                         (first entry)
                                                         Conservative
Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EP1281758-A2
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                                                                                                                                                                                                                                                                     ADB03815;
                                                                                                                                                                                            RESULT 139
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922 CTGTTCCAGCTGCTCGTGGCCTGG 946

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1033 GACTTTGGCCTGGCCCG 1049

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New oligonucleotides, which specifically hybridizes with Jun N-terminal kinase protein, useful in diagnosing or treating inflammation, fibrosis or a fibrotic or hyperproliferative disease or condition.
                                            Human, Jun N-terminal kinase, JNK; Jun N-terminal kinase 2; JNK2;
hyperproliferative disease; cell cycle progression;
protein phosphorylation; tumour growth, cancer; apoptosis;
prostate cancer; inflammation; fibrosis; fibrotic disease; scarring;
peritoneal adhesion; lung fibrosis; conjunctival scarring; cytostatic;
                           Human Jun N-terminal kinase 2 (JNK2) oligonucleotide #3
                                                                                                                                                                                                                                                                                                           Nero PS,
                                                                                                                                                                                                                                                                                                                                                                                    Claim 25; SEQ ID NO 31; 71pp; English.
                                                                                             antiinflammatory; vulnerary; ss.
                                                                                                                                                                                                  98US-00130616.
99US-00287796.
99US-00396902.
                                                                                                                                                                                                                                                                                                          Mckay R, Dean NM, Monia BP,
                                                                                                                                                                       15-JAN-2003; 2003US-00345444
                                                                                                                                                                                          97US-00910629
                                                                                                                                                                                                                               31-JAN-2001; 2001US-00774809
         (first entry)
                                                                                                                                                                                                                                                        DEAN N M.
MONIA B P.
NERO P S.
GAARDE W A.
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                                                                                                                                   JS2004029823-A1.
                                                                                                                                                                                                                                                  MCKAY
                                                                                                                 Homo sapiens.
                                                                                                                                                                                                           07-APR-1999;
15-SEP-1999;
         01-JUL-2004
                                                                                                                                                     12-FEB-2004.
                                                                                                                                                                                          13-AUG-1997;
                                                                                                                                                                                                    17-AUG-1998;
                                                                                                                                                                                                                                                                             (NERO/)
(GAAR/)
                                                                                                                                                                                                                                                 (MCKA/)
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Gaarde WA;

connected by covalent linkages, where the oligonucleotide has a sequence specifically hybridisable with a nucleic acid encoding a Jun N-terminal kname modulates the expression of the JMK protein. The invention also relates to a pharmaceutical composition comprising the cinvention also relates to a pharmaceutical composition comprising the oligonucleotide(s) or its bioequivalent and a pharmaceutical carrier, a method of treating an animal having, suspected of having or prone to having a hyperproliferative disease, a method of modulating the expression of a JMK protein in cells or itssues, a method of modulating captession, phosphorylation of a protein phosphorylated by a JMK protein and expression of a cellular protein that promotes one or more metastatic events in cultured cells or the cells of an animal, a method of inhibiting the growth of a tumour in an animal, a method of inducing apoptosis in a cell, a method of treating a manimal having a disease or condition associated disease or condition an animal having a disease or condition associated dispensing or treating a disease or condition associated dispensing or treating a disease or condition associated dispension of the oligonucleotide and composition are useful in dispensing or treating a disease or condition associated dispense or condition (e.g. prostate cancer), a disease or condition (e.g. cancer), or in inhibiting the growth of a tumour. This sequence condition (e.g. cancer), or in inhibiting the growth of a tumour. This sequence The invention relates to an oligonucleotide comprising 8-30 nucleotides oligonucleotide of the invention. Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other; represents a human JNK2

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Gaps ·,

0; Indels

1.0%; Score 17; DB 1; Length 20; 00.0%; Pred. No. 2.7e+02;

100.0%; Pred. .v..

Conservative

Local Similarity nes 17; Conserv

Matches Best

Query Match

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The invention relates to an oligonucleotide comprising 8-30 nucleotides connected by covalent linkages, where the oligonucleotide has a sequence specifically pybridisable with a nucleic acid encoding a Jun N-terminal kinase (JNK) protein and modulates the expression of the JNK protein. The consolidates the expression of the JNK protein. The invention also relates to a pharmaceutical composition comprising the coligonucleotide(s) or its bloequivalent and a pharmaceutical carrier, a method of treating an animal having, suspected of having or prone to having a hyperproliferative disease, a method of modulating the capression of a JNK protein in cells or tissues, a method of modulating cell cycle progression, phosphorylation of a protein that promotes one or JNK protein and expression of a cultured cells or the cells of an animal, a method of inhibiting the growth of a tumour in an animal, a method of inhibiting the growth of a tumour in an animal, a method of treating an animal having a disease or condition associated with a JNK protein. The oligonucleotide and composition associated with a JNK protein. The oligonucleotide and composition associated with a JNK protein (e.g. prostate cancer), a disease or condition associated associated with a JNK protein (e.g. prostate cancer), a disease or condition associated associated with a JNK protein (e.g. inflammation, fibrosis), a fibrosis, use condition associated with a JNK protein (e.g. prostate cancer), a disease or condition associated with a JNK protein (e.g. inflammation, fibrosis), a fibrosis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New oligonucleotides, which specifically hybridizes with Jun N-terminal kinase protein, useful in diagnosing or treating inflammation, fibrosis or a fibrotic or hyperproliferative disease or condition.
                                                                                                                                                                                                                                                                                                     hyperproliferative disease, cell cycle progression, procesn phosphorylation; tumour growth, cancer, apoptosis; protecte cancer, inflammation, fibrosis; fibrotic disease, scarring; peritoneal adhesion; lung fibrosis; conjunctival scarring; cytostatic; antiinflammatory; vulnerary; ss.
                                                                                                                                                                                                                                                                                      Human; Jun N-terminal kinase; JNK; Jun N-terminal kinase 2; JNK2;
                                                                                                                                                                                                                                                 Human Jun N-terminal kinase 2 (JNK2) oligonucleotide #14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaarde WA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Monia BP, Nero PS,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US-00910629.
98US-00130616.
99US-00287796.
99US-00396902.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-JAN-2001; 2001US-00774809
20 GACTTTGGCCTGGCCCG
                                                                                                                      ADN48331 standard; DNA; 20
                                                                                                                                                                                                        01-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-168941/16.
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MONIA B P.
NERO P S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GAAR/) GAARDE W A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2004029823-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
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07-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-APR-1999;
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                                                                                                                                                               ADN48331;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MCKA/)
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Tue Nov

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promotes one or more metastatic events in cultured cells or the cells of
an animal) by administering the oligonuclectide to the cells, inhibiting
the growth of a tumour in an animal by administering the oligonucleotide,
inducing apoptosis in a cell by contacting a cell with an AS
oligonucleotide for JMX2 and treating a human having a disease or
condition associated with a JMK protein or cherapeutic amount of the
in apoptosis by administering a prophylactic or therapeutic amount of the
AS oligonuclectide. The antisense oligonucleotide is useful for treating
a disease or condition characterised by a reduction in apoptosis, such as
to prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic
disease or condition (e.g. fibrotic scarring, peritoneal adhesions, lung
fibrosis or conjunctival scarring), hyperproliferative disease or
condition, such as cancer. The antisense oligonucleotides may also be
used as research agents and diagnostic aids, to detect the presence of
UNK protein-specific nucleic acids in a cell or tissue sample, and to
study the function of one or more genes in the animal. The present
Study the function of one or more genes in the animal. The present
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Immunostimulatory, antiinflammatory, dermatological, antipsoriatic, antiulcer; gene therapy, vaccine; non-allergic inflammatory disease, psoriasis; eczema; allergic contact dermatitis; latex dermatitis; inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Treating non-allergic inflammatory diseases, such as psoriasis, ecz
allergic contact dermatitis, latex dermatitis or inflammatory bowel
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                                                                                                                                                                                                                                                                                                                                                                                                                                       1.0%; Score 17; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Pred. No. 2.7e+02; ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Immunostimulatory nucleic acid #301.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 16; 229pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1033 GACTITGGCCTGGCCCG 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACD99615 standard; DNA; 20 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 GACTITGGCCTGGCCCG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 100.
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACD99615/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a method of treating or preventing allergy or asthma which comprises administering to a subject a poly-G nucleic acid in an aerosol formulation. The methods and compositions of the present invention are useful for diagnosing and/or treating asthma and allergy especially in a hypo-responsive subject. The present sequence represents an immunostimulatory nucleic acid of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Treating and/or preventing allergy or asthma using an immunostimulatory nucleic acid alone or in combination with an asthma/allergy medicament.
inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
This sequence represents an immunostimulatory nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                   ds; allergy; asthma; poly-G nucleic acid; aerosol formulation; hypo-responsive subject; immunostimulatory.
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                                                                           Length 20;
                                                                                                        0; Indels
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                                           Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
                                                                        Query Match
1.0%; Score 17; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 2.7e+02;
Matches 17; Conservative 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fouron Y;
                                                                                                                                                                                                                                                                                                                                        [mmunostimulatory nucleic acid #299.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 9; 221pp; English.
                                                                                                                                       1033 GACTITGGCCTGGCCCG 1049
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                                                                                                                                                                    GACTTTGGCCTGGCCCG 4
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                                                                                                                                                                                                                                                                                                           04-DEC-2003 (first entry)
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Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (BRAT/) BRATZLER R
(PETE/) PETERSEN D
(FOUR/) FOURON Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                US2003087848-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
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Indels

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Pred. No. 2.7e+02; Mismatches

100.0%;

Best Local Similarity

Human JNK2 sense control oligonucleotide ISIS12560. Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other; WPI; 2003-311908/30 US2003004120-A1 Homo sapiens 13-AUG-1997; 07-AUG-1998; 07-APR-1999; 15-SEP-1999; 02-JAN-2003 (MCKA/) (MONI/) (DEAN/) (GAAR/) 

Matches à 셤 The invention relates to an oligonucleotide (antisense, AS) comprising 830 nucleotides connected by covalent linkages, where the oligonucleotide
has a sequence specifically hybridisable with a nucleic acid encoding a
Jun N-terminal kinase (JMK) protein and modulates the expression of the
Jun N-terminal kinase (JMK) protein and modulates the expression of the
Jun N-terminal kinase (JMK) protein and modulates the expression of the
CC JUN protein. Also included are a pharmaceutical composition comprising
CC carrier), treating an animal having/suspected of having/prone to having a
CC carrier), treating an animal having/suspected of the AS oligonucleotide),
CC hyperproliferative disease (by administering to a prophylactic or
CC therapeutic amount of the composition of the AS oligonucleotide,
CC modulating the cells or tissues with the AS oligonucleotide,
CC contacting the cells or tissues with the AS oligonucleotide,
CC contacting the cells or the phosphorylated by a JUN protein, or expression of a cellular protein that
CC promotes one or more metastatic events in cultured cells or the cells of
CC an animal) by administering the oligonucleotide to the cells of
CC an animal) by administering a human having a disease or
CONGULTION associated with a JUN protein or characterised by a reduction
CC ordition associated with a JUN protein or characterised by a reduction
CC ordition associated with a JUN protein or characterised by a reduction
CC ordition associated with a JUN protein or prostate cancer or prostate tumour, inflammation, fibrosis or fibrotic
CC disease or condition characterised by a reduction in apoptosis, such as
CC condition, such as cancer. The antisense oligonucleotides may also be
CC condition, such as cancer. The antisense oligonucleotide may also be
CC condition, such as cancer and administrating and calls or tissue sample, and to see a protein of one or more genes in the animal propersity of the function of one or more genes in the animal protein of the protein of the content of the content of the New oligonucleotides which hybridizes to, and modulates the expression of Jun N-terminal kinase, useful for treating a disease or condition characterized by a reduction in apoptosis, e.g. prostate cancer, human; Jun N-terminal kinase; JNK1; JNK2; JNK3; cytostatic; antiinflammatory, apoptosis, prostate cancer, prostate tumour, inflammation, fibrosis, fibrotic disease; fibrotic scarring, peritoneal adhesion, lung fibrosis, conjunctival scarring, hyperproliferative disease, cancer, probe. sequence is a sense control oligonucleotide for antisense Gaarde WA; Nero P, oligonucleotides targeting a human JNK. Example 4; Page 26; 69pp; English. 97US-00910629. 98US-00130616. 99US-00287796. 99US-00396902. Mckay R, Dean NM, Monia BP, 31-JAN-2001; 20.01US-00774809. inflammation or fibrosis. MCKAY R. DEAN N M. MONIA B P. NERO P. GAARDE W A.

1.0%; Score 17; DB 1; Length 20;

Query Match

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The invention relates to an oligonucleotide (antisense, AS) comprising 8-30 nucleotides connected by covalent linkages, where the oligonucleotide has a sequence specifically hybridisable with a nucleic acid encoding a Jun N-terminal kinase (JNK) protein and modulates the expression of the JNK protein. Also included are a pharmaceutical composition comprising the AS oligonucleotide (or its bioequivalent, and a pharmaceutical carrier), treating an animal having/suspected of having/prone to having shyperproliferative disease (by administering to a prophylactic or therapeutic amount of the composition of the AS oligonucleotide), contacting the expression of a JNK protein in cells or tissues by contacting the cells or tissues with the AS oligonucleotide, modulating the expression (or the phosphorylation of a protein phosphorylated by a JNK protein, or expression of a cellular protein that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New oligonucleotides which hybridizes to, and modulates the expression of Jun N-terminal kinase, useful for treating a disease or condition characterized by a reduction in apoptosis, e.g. prostate cancer, inflammation or fibrosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Human Jun N-terminal kinase, JNK2, antisense oligonucleotide ISIS12560.
     Gaps
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     .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ss; human; Jun N-terminal kinase; JNK1; JNK2; JNK3; antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytostatic; antiinflammatory; apoptosis; prostate cancer; prostate tumour; inflammation; fibrosis; fibrotic disease; fibrotic scarring; peritoneal adhesion; lung fibrosis;
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98US-00130616.
99US-00287796.
99US-00396902.
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                                                                                               GACTTTGGCCTGGCCCG
                                                              1033 GACTTTGGCCTGGCCCG
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*tag= a
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MONIA B P.
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modified_base
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07-APR-1999;
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                                                                                                                                                                                                                                                                                                                          ADA26578;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo
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GACTTTGGCCTGGCCCG

20

Antibody-induced cell lysis; cancer; immunostimulatory; CD20; angiogenesis; metastasis; cytostatic; phosphorothioate backbone;

Immunostimulatory nucleic acid SEQ ID NO: 463

(first entry)

16-APR-2002

ABL39057;

/\*tag= a /mod\_base= OTHER /note= "phosphorothioate backbone"

22-JUN-2000; 2000US-0213346P.

(IOWA ) UNIV IOWA RES FOUND.

Weiner G, Hartmann WPI; 2002-154611/20.

22-JUN-2001; 2001WO-US020154

WO200197843-A2

27-DEC-2001

Location/Qualifiers

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modified base

Synthetic

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The invention relates to inhibiting angiogenesis in a subject, comprising administering at least one antianglogenic nucleic acid molecule. Also included is a kit comprising a first container housing the antiangiogenic nucleic acids, and instructions for administering them to a subject nucleic acids, and instructions for administering them to a subject having a condition characterised by unwanted angiogenesis. The method is useful for inhibiting angiogenesis associated with solid tumour growth, tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis, diabetic retinopathy, retinopathy of prematurity, macular degeneration, corneal graft rejection, neovascular glaucoma, retrolental fibroplasia, rubeosis, Osler Webber Syndrome, myocardial angiogenesis, plaque neovascularisation, telangiectasia, haemophiliac joints, angiofibroma, wound granulation, intestinal adhesions, atherosclerosis, scleroderma and hypertrophic scars. The present sequence is an antiangiogenic nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Inhibiting angiogenesis in a subject, involves administering at least one antiangiogenic nucleic acid molecule to the subject.
                                                                                                                                                                                Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth; tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis; diabetic retinopathy; retinopathy of prematurity; macular degeneration; corneal graft rejection; neovascular glaucoma; retrolental fibroplasia; rubeosis; Osler-Webber Syndrome; myocardial angiogenesis; pladue neovascularisation; telangiectasia; haemophiliac joint; angiofibroma; wound granulation; intestinal adhesion; atherosclerosis; scleroderma; hypertrophic scar.
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100.0%; Pred. No. 2.7e+02;
ive 0; Mismatches 0; Indels
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                                                                                                                                           Angiogenesis inhibitory oligonucleotide #311.
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                     BP
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                     ABS77827 standard; DNA; 20
                                                                                                    (first entry)
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                                                                                                    13-DEC-2002
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                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                            ABS77827;
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ABS77827/C
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Treating or preventing cancer, such as basal cell carcinoma, comprises administering immunostimulatory nucleic acids that induce expression of cell surface antigens and antibodies to a subject having or at risk of

Disclosure, Page 212; 312pp; English.

developing cancer

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The present invention relates to methods for treating or preventing cancer, involving administering to a subject having or at risk of cancer, involving administering to a subject having or at risk of developing cancer immunostimulatory nucleic acids that induce expression of cell surface antigens and antibodies. The methods are useful for treating or preventing cancer such as basal cell carcinoma, bladder cancer, bone cancer, brain and central nervous system (ONS) cancer, breast cancer, cervical cancer, colon and rectum cancer, connective tissue cancer, oesophageal cancer, colon and rectum cancer, larymx cancer, leukaemia, liver cancer, lung cancer, kidney cancer, larymx cancer, leukaemia, liver cancer, lung cancer, kidney cancer, larymx cancer, pancreatic cancer, prostate cancer, rhaddomyosarcoma, skin cancer, stomach cancer, testicular cancer, and uterine cancer. The present sequence is an immunostimulatory oligonucleotide described in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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Best Local Similarity 100...
These 17; Conservative
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Gaps ó.

ABL39057 standard; DNA; 20 BP

RESULT 131 ABL39057/c ID ABL390

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27-SEP-1999;
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                    nuclectide encoding a Jun N-terminal kinase (JNK2) protein, resulting in decrease of JNK2 expression and leading to induction of apoptosis. The present sequence is one such antisense oligonuclectide. The oligonuclectides of the present invention are useful for treating diseases or conditions with reduced apoptosis, e.g. cancer and cellular hyperproliferation. The oligonuclectides may also be used to increase the stimulation of apoptotic proteins, e.g. for treating Alzheimer's or Parkinson's disease, amylotrophic lateral sclerosis, retinitis,
                                                                                                                                                                                                                                                                                   pigmentosa, epilepsy, mycardial infarction, stroke, obstructive jaundice, polycystic kidney and diabetes. The present sequence may have a phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "This oligonucleotide is a 2'-0-methoxyethyl (MOE) chineric antisense oligonucleotide containing five MOE/phoshopdiester residues flanking a 2'-deoxynucleotide/phosphorothioate region"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Use of Jun Kinase antisense mRNA for treating cancer by administering vector comprising promoter operably linked to DNA sequence that encodes the antisense mRNA to patient diagnosed with cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to the use of Jun Kinase (JNK) antisense oligonucleotides for treating cancer and for screening compounds that mimic or augment the effect of JNK antisense oligonucleotides treatment for cancer. The present sequence is one such JNK antisense oligonucleotide
AAA96093-A96099 and AAA07993) that hybridise specifically to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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2'-O-methoxyethyl oligonucleotide; MOE; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.0%; Score 17; DB 1; Length 20; 100.0%; Pred. No. 2.7e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JNK1 antisense oligonucleotide, JNK2AS, (ISIS #12560)
                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gorospe M, Holbrook NJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag= a
/mod_base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACTITGGCCTGGCCCG 1049
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
es 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200134792-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-MAY-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Vaccine, cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic; immunostimulatory; tumour; viral infection; bacterial infection; fungal infection; parasitic infection; cancer; asthma; infections disease; allergy; immune deficiency; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vaccinating against tumors, infectious diseases, allergies and asthma using immunostimulatory Py-rich and TG nucleic acids.
                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                          .0%; Score 17; DB 1; Length 20; 0.0%; Pred. No. 2.7e+02;
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Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
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                                                                             100.0%; Pred. ...
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99US-0156135P.
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Best Local Similarity
Local 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                            AAF99183 standard, DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-JUN-2001 (first entry)
                                                                                                                              Conservative
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                                                       Query Match
Best Local Similarity
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Monia BP,

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The present invention relates to antisense oligonucleotides (AAC62844-C63000, AAA6099-A96099 and AAA0799) that hybridise specifically to a nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in decrease of JNK2 expression and leading to induction of apoptosis. The present sequence is one such antisense oligonucleotide. The oligonucleotides of the present invention are useful for treating diseases or conditions with reduced apoptosis, e.g. cancer and cellular hyperproliferation. The oligonucleotides may also be used to increase the stimulation of apoptotic proteins, e.g. for treating Alzheimer's or Parkinson's disease, amylotrophic lateral sclerosis, retinitis, pigmentics, epilepsy, myocardial infarction, stroke, obstructive jaundice, polycystic kidney and diabetes. The present sequence may have a
                                                                     Novel methods for reducing apoptosis comprising contacting cells with antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel methods for reducing apoptosis comprising contacting cells with antisense oligonucleotides, useful for treating apoptotic disorders, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense; gene therapy; JNK2 protein; apoptosis; cancer; cellular hyperproliteration; Alzeimer, s; Parkinson's disease; amylotrophic lateral scletosis; retinitis; pigmentosa; epilepsy; myocardial infarction; stroke; obstructive jaundice; polycystic kidney;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 1.0%; Score 17; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 2.7e+02; Matches 17; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                       Example 4; Page 135; 160pp; English.
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                    WPI; 2000-638427/61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 127
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                                                                                                                                                                                                                                                                                                                                                                                                             attisense inhibition of a tumour necrosis factor (TNF) alpha signalling molecule. In the method TNF alpha signalling molecules Ha-ras, c-raf and c-Jun N-terminal kinase (UNK)2 were inhibited by antisense clustense oligomucleotides. In addition an antisense oligomucleotide to the cell adhesion molecule E-selectin was also examined. The present sequence is the UNK2 antisense oligomucleotide. The antisense oligomucleotides used in the method contained modifications, namely phosphorothicate linkages and 2 methoxyethoxy bases. Some C residues also had a 5 methyl and 2 methoxyethoxy bases. Some C residues also had a 5 methyl antibacterial, immunosuppressive, antipsoriatic, antidabetic, antibacterial, immunosuppressive, antipsoriatic, antidabetic, antithyroid, cytostatic, dermatological, antiallergic and antiinflammatory activity. The antisense inhibitors may be useful for the treatment of sepsis, rheumatoid arthritis, inflammatory, immune disease, inflammatory bowel disease, allergic contact dermatitis, psoriasis, diabetes, Grave's disease, allograft rejection and cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                A novel method for modulating cell adhesion molecule expression involves
                                                                                                                                                                                                                                          Modulating cell adhesion molecule expression for treating immune or inflammatory diseases involves treating cell with specific inhibitor of Tumor Necrosis Factor alpha signaling molecule.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cellular hyperproliferation; Alzheimer's; Parkinson's disease; amylotrophic lateral sclerosıs; retinitis; pigmentosa; epilepsy; myocardial infarction; stroke; obstructive jaundice; polycystic kidney; diabetes; Jun N-terminal kinase; ss.
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Pred. No. 2.7e+02;
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                                                                                                                                                                                                                                                                                                                                               Claim 36; Page 46; 100pp; English
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99WO-US028965.
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                                              98US-00209668
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                                                                                               (ISIS-) ISIS PHARM INC
                                                                                                                                                                                            WPI; 2000-423367/36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
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08-DEC-1999;
                                              10-DEC-1998;
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RESULT 126

AAC62885

Query Match Best Local

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antisense oligonucleotides that detect and modulate the expression of
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                                                                                                                        The invention relates to antisense oligonucleotides that detect and modulate the expression of Jun N-terminal kinase (JMK) proteins. The oligonucleotides specifically hybridize to a nucleic acid encoding a JMK1, JMK2 or JMK3 protein, and which modulate expression of these proteins. The oligonucleotides are useful for modulating JMK protein expression and cell cycle progression in cultured cells or animal cells. The oligonucleotides are also useful for modulating the phosphorylation of a protein that has been phosphorylated by a JMK protein, and the expression of a cellular protein that promotes one or more metastatic events. The oligonucleotides also form pharmaceutical compositions for treating animals with a hyperproliferative disease, and for inhibiting
                         Jun N-terminal kinase proteins - useful for treating hyperproliferative diseases and inhibiting tumor growth in animals, and for modulating protein phosphorylation by these proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            are 2'-methoxyethoxy, additionally C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        are 2'-methoxyethoxy, additionally
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        note = "Phosphorothioate internucleotide linkage"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense oligonucleotide ISIS no.15354 to human JNK2 gene.
                                                                                                                                                                                                                                                                                                                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                     1.0%; Score 17; DB 1; Le
100.0%; Pred. No. 2.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense; E-selectin; TNF alpha; cell adhesion;
                                                                                                                                                                                                                                                                                                                                                                               100.0%; Pred. No. -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                             Example 4; Page 87; 190pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mod_base= OTHER
/note= "All bases
bases are m5c"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note = "All bases
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                                                                                                                                                                                                                                                                                                                                                                                                                                      1033 GACTTTGGCCTGGCCCG 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          bases are m5c"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACTITGGCCTGGCCCG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA48651 standard; DNA; 20
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/*tag= b
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                                                                                                                                                                                                                                                                                                            tumor growth in an animal
                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16. .20
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                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200034303-A1
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                                                                                                                                                                                        New antisense oligonucleotides that detect and modulate the expression of Jun N-terminal kinase proteins - useful for treating hyperproliferative diseases and inhibiting tumor growth in animals, and for modulating protein phosphorylation by these proteins.
                                                                                                                                                                                                                                                                                                     The invention relates to antisense oligonucleotides that detect and andulate the expression of Jun N-terminal kinase (JMK) proteins. The oligonucleotides specifically hybridize to a nucleic acid encoding a JNK1, JNK2 or JNK3 protein, and which modulate expression of these JNK1 in the oligonucleotides are useful for modulating JNK protein expression and cell cycle progression in cultured cells or animal cells. The oligonucleotides are also useful for modulating the phosphorylation of a protein that has been phosphorylated by a JNK protein, and the cypression of a cellular protein that promotes one or more metestatic events. The oligonucleotides also form pharmaceutical compositions for treating animals with a hyperproliferative disease, and for inhibiting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1; JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe; hyperproliferative disease; human; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 17; DB 1; Length 20;
Pred. No. 2.7e+02;
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                                                                                                                             Gaarde WA;
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100.0%; Pred. No. 2...
                                                                                                                             Monia BP, Nero PS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nero PS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JNK2-specific probe ISIS No: 12560.
                                                                                                                                                                                                                                                                          Example 4; Page 92; 190pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1033 GACTTTGGCCTGGCCCG 1049
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                               98WO-US016488.
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                                                              97US-00910629
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tumor growth in an animal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 100.
Les 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                                            ISIS PHARM INC
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                                                                                                                                                          WPI; 1999-181060/15
                                                                                                                             Mckay R, Dean N,
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                               07-AUG-1998;
                                                              13-AUG-1997;
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 25-FEB-1999
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                                                                                             (ISIS-)
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sickle cell retinopathy; ss.

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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in interpretation, marrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (11) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used cleaves RNA encoding cytokine involved in inflammation. (1) can be used cleaves such as psoriasis, atopic dermatchis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic also be used for treating pathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scring such as keloid, adhesion and hypertrophic or hypertrophic burn
                                                                                                                                                                                                                                                                                                                                                                       Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ss; probe; expressed sequence tag; microarray; gene expression; ic variation; biallelic marker; polymorphism; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            scarring such as kelloid, adhesion and hyperrrophic or hypertrophic scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.0%; Score 17.4; DB 1; Length 19; 94.7%; Pred. No. 2.2e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human microarray DNA oligonucleotide SEQ ID NO 39567.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 97; 408pp; English
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                                                                                                                                                                         26-OCT-2000; 2000WO-US029500.
                                                                                                                                                                                                                99US-0161532P.
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Best Local Similarity 94.7
Matches 18; Conservative
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                                                                                                                                                                                                                                                                                             Robbins JM, Tritz R;
                                                                                                                                                                                                                                                     IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                  WPI; 2001-300427/31.
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                                                                                            WO200130362-A2
                                     Homo sapiens.
Synthetic.
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                                                                                                                                    33-MAY-2001
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The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018 500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in analysis of genetic variation or in hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes in situ hybridisation, in soluthern, Northern or dottober hybridisation to identify or detect the sequence or specific matations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at sequence. The lectronic format directly from USPTO at sequence.
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                                                                                                                                                                                                                                                                       New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 39567; 9pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1256 TAGGAACCCCAACTGAGGAGAC 1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 TAGGCACTCGAACTGAGGAGAC 25
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                                                           15-MAR-2002; 2002US-00098263.
                                                                                                      16-MAR-2001; 2001US-0276759P.
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                                                                                                                                             (AFFY-) AFFYMETRIX INC
                                                                                                                                                                                                                                  WPI; 2003-567953/53.
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                                                                                                                                                                                        Mittmann MP;
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                 05-JUN-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX29342
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AAH57923;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MWP; matrix metalloproteinase; growth factor; reductase; scarring; oytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AAA88415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                         Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                            New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDKI, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:343.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.0%; Score 17.4; DB 1; Length 19; 94.7%; Pred. No. 2.2e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                     Robbins JM;
                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 51; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           993 GAACCTGCTCATCAACGAG 1011
                                                                                                                                                                                                                                                     Barber JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAACCTGCTCATCAATGAG 19
                                                                  cdk3 ribozyme binding site #42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAH57919 standard; DNA; 19 BP
BP
                                                                                                                                                                                  99WO-US028772.
                                                                                                                                                                                                         98US-0110954P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18; Conservative
AAA82757 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   restenosis treatment
                                                                                                                                                                                                                                                     Tritz R, Welch PJ,
                                                                                                                                                                                                                                                                         WPI; 2000-412314/35
                                                                                                                                                                                                                              (IMMU-) IMMUSOL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                      WO200032765-A2.
                                                                                                                                                                                                         04-DEC-1998;
                                             04-DEC-2000
                                                                                                                                                                                  06-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-SEP-2001
                                                                                                                                                           38-JUN-2000
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                                                                                                                 Mammalia.
                     AAA82757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 120
AAH57919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytckine involved in inflammation, matrix metalloproteinase (MWP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a cucleic acid segment encoding (I). (I) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytckine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, crinopathy of prematurity and retinal detachment, and for treating and preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cytokine; inflammation, cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, ribozyme therapy, hairpin ribozyme, hammerhead ribozyme,
recognition site, target, ribozyme binding site, eye disease, vulnerary,
proliferative disease, skin disease, psoriasis, diabetic retinopathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:347.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             scarring such as keloid, adhesion and hypertrophic or hypertrophic scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 96; 408pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13
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                                                                                                                                                                                                                                                      26-OCT-2000; 2000WO-US029500.
                                                                                                                                                                                                                                                                                                                                           99US-0161532P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-SEP-2001 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-300427/31.
                                                                                                                                                                                                                                                                                                                                                                                                                            (IMMU-) IMMUSOL INC.
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Best Local Similarity
Matches 18; Conserv
                                                                            WO200130362-A2
                                                                                                                                                                                                                                                                                                                                       26-OCT-1999;
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                                                                                                                                                                     03-MAY-2001
Synthetic.
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10017621-381.rng

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10-JUN-2002; 2002US-0387866P.
11-JUN-2002; 2002US-0387666P.
11-JUN-2002; 2002US-0387666P.
11-JUN-2002; 2002US-0387668P.
11-JUN-2002; 2002US-0387668P.
11-JUN-2002; 2002US-0387668P.
12-JUN-2002; 2002US-0387934P.
12-JUN-2002; 2002US-0387934P.
12-JUN-2002; 2002US-0388960P.
12-JUN-2002; 2002US-0388912P.
13-JUN-2002; 2002US-0388132P.
13-JUN-2002; 2002US-0389120P.
14-JUN-2002; 2002US-0389120P.
14-JUN-2002; 2002US-0389144P.
17-JUN-2002; 2002US-0389144P.
18-JUN-2002; 2002US-0389144P.
19-JUN-2002; 2002US-0389144P.
19-JUN-2002; 2002US-0389144P.
                                                                                                                                                                                         2002US-0390209P.
2002US-0401628P.
2002US-0402268P.
2002US-0402822P.
2002US-0403428P.
2002US-0403458P.
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2002US-0406182P.
2002US-0410085P.
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2002US-0415195P.
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                                                                                                                                                                                                                                                                                                                  24-OCT-2002; 2002US-0420852P.
31-OCT-2002; 2002US-0422750P.
                                                                                                                                                                                                                                                                                                                                   2002US-0423095P
                                                                                                                                                                                                                                                                                                                                             05-NOV-2002; 2002US-0423748P
                                                                                                                                                                                                                                                15-AUG-2002; 26-AUG-2002; 212-SEP-2002; 23-SEP-2002; 23-SEP-2002; 23-SEP-2002; 23-SEP-2002; 2
                                                                                                                                                                                                25-JUN-2002;
06-AUG-2002;
                                                                                                                                                                                19-JUN-2002;
                                                                                                                                                                                                                 09-AUG-2002;
                                                                                                                                                                                                                         12-AUG-2002;
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                                                                                                                                                                                                                                         15-AUG-2002;
                                                                                                                                                                                                                                                                                                                                   01-NOV-2002;
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## (CURA-) CURAGEN CORP.

Kekuda R; Burgess CE, Casman SJ, Catterton E, Dhanabal M, Edinger SR, Ellerman K, Ettenberg S, Gangolli EA, Gerlach VL, Gorman L; Erosse WM, Gunther E, Guo X, Gusev VY, Herrmann JL, Ji W, Kekuda F Khramtsov NV, Larochelle WJ, Li L, Liang H, Low K, Macdougall JR; Maclachlan T, Malyankar UM, Mcqueeney K, Mezick AJ, Miller CE; Millet I, Paddigaru M, Patturalan M, Peyman AJ, Qian X, Rastelli L; Rieger DK, Rothenberg ME, Shenoy SG, Shimkets RA, Stone DJ, Sukumaran S, Szekeres ES, Vernet CAM, Voss EZ; Wolenc AR, Zhong M, Zhong H;

## WPI; 2004-053467/05.

New NOVX polypeptides and nucleic acid molecules useful for preventing or treating NOVX-associated disorders, e.g. cancer, cardiomyopathy, atherosclerosis or diabetes, in chromosome mapping, tissue typing or pharmacogenomics.

## Disclosure; SEQ ID NO 1453; 1503pp; English.

The invention relates to 566 new isolated human polypeptides and their encoding genes, sequences that are at least 95% identical to these or sequences comprising one or more conservative substitutions in these. The polypeptide, polynucleotide and antibodies against the polypeptides are useful in diagnosing, treating or preventing NOVX-associated disorders, e.g. cardiomyopathy, atheroscierosis, hypertension, cancer, obesity, diabetes, AlDS, multiple sclerosis, graft-versus-host disease, Alzheimer's disease, Parkinson's disease, asthma, or fertility disorders.

RESULT 119 AAA82757

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The nucleic acids are further used as hybridization probes, in chromosome ampping, tissue typing, preventive medicine, and pharmacogenomics. The polypebtides are also useful as vaccines. This sequence represents an example of a probe used to isolate the nucleic acid sequences of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                            Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        present invention relates to a hairpin or hammerhead ribozyme
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0
                                                                                                                         1.0%; Score 17.6; DB 1; Length 26; 83.3%; Pred. No. 2.7e+02;
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                                                                                                                                                        4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                           Sequence 26 BP; 10 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Robbins JM;
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                                                                                                                                                                                     972 ACACCGAGACCTCAAGCCCCAGAA 995
                                                                                                                                                                                                                   1 ATACCGAGACCTGAAACCCCACAA 24
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                                                                                                                                                                                                                                                                                                                                                                                             cdk3 ribozyme binding site #46.
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                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                               Query Match
Best Local Similarity 83.33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 94.7
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (IMMU-) IMMUSOL INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-JUN-2000
                                                              invention.
                                                                                                                                                                                                                                                                                                                               AAA82761;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mammalia
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                 AAA8276
88888888
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03-APR-2001; 2001US-0281086P.
05-APR-2001; 2001US-028136P.
05-APR-2001; 2001US-0281963P.
06-APR-2001; 2001US-0281906P.
10-APR-2001; 2001US-0282324P.
12-APR-2001; 2001US-0282324P.
13-APR-2001; 2001US-0285325P.
23-APR-2001; 2001US-0285325P.
25-APR-2001; 2001US-0285325P.
25-APR-2001; 2001US-028659P.
27-APR-2001; 2001US-028659P.
27-APR-2001; 2001US-028657P.
12-MAY-2001; 2001US-029134P.
11-MAY-2001; 2001US-029173P.
11-MAY-2001; 2001US-029173P. WO200281629-A2 04-JAN-2002; 17-OCT-2002. Spytek KA, 

multiple sclerosis, ataxia-telangiectasia, leikodystrophy, auxiety, behavioural disorder; addiction, neuroprotection, diabetes; ARDS; renal artery stenosis, interstitial nephritis, glomerulonephritis; polycystic kidney disease; systemic lupus erythematosus; IgA; probe; renal tubular acidosis; immunoglobulin A nephropathy; hypercalcaemia; cirrhosis; transplantation; asthma; emphysema; scleroderma; GVHD; adult respiratory distress syndrome; graft versus host disease; lymphedema; fertility; pancreatitis; obesity; haemophilia; ulcer; anaemia; cancer; trauma; regeneration; infection; RTQ-PCR; Huntington's disease; cerebral palsy; Lesch-Nyhan syndrome; pain; real-time quantitative PCR.

Homo sapiens.

03-APR-2002; 2002WO-US010522

2002US-0345221P 2002US-00345221

CURA-) CURAGEN CORP.

A, Li L, Edinger SR, Ellerman K, Stone DJ, Malyankar UM; RA, Guo X, Anderson DW, Patturajan M, Berghs C, Gerlach V; V, Pena CEA, Padigaru M, Liu Y, Burgess CE, Miller CE; Kekuda R, Gorman L, Zerhusen BD, Baumgartner JC; VT, Vernet CAM, Smithson G, Heyes MP, Shenoy SG, Liu X; Tchernev VT, Gangolli EA; raupier RJ, Gusev VY,

WPI; 2003-046863/04.

New polypeptides, designated NOVX polypeptides, useful for treating hemophilia, idiopathic thrombocytopenic purpura, autoimmune disease, allergies, transplantation, Alzheimer's disease and stroke.

Example C; Page 264; 320pp; English.

The invention relates to an isolated NOVX polypeptide selected from NOV1-NOV27 polypeptides, a mature form of NOVX, a variant of NOVX or a fragment of NOVX Also included are determining the presence or amount of NOVX in a sample (by using an antibody that immunospecifically bind to the polypeptide), determining the presence of or predisposition to disease associated with altered levels of NOVX in a first mammalian subject, identifying a potential therapeutic agent for use in the treatment of pathology related to aberrant expression of physiological interactions of NOVX, screening for a modulator of activity or of latency or predisposition to a pathology associated with NOVX, the nucleic acid encoding NOVX, vectors and host cells. NOVX is useful for identifying an agent (a cellular receptor or downstream effector) that binds to NOVX. NOVX and NOVX and NOVX nucleic acids are useful for treating or preventing NOVX-

2002US-038707BP. 2002US-0387081P. 2002US-0387083P.

07-JUN-2002; 07-JUN-2002;

07-JUN-2002;

2002US-0386701P. 2002US-0386796P. 2002US-0386931P.

06-JUN-2002; 06-JUN-2002; 07-JUN-2002;

for treating a NOVX related disease human disease. G a medicament of treating a NOVX related disease human disease. G adrenoleukodystrophy, congenital adrenal hyperplasia, haemophilia, hypercoagulation, idiopathic thrombocytopaenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Von HippelCC Lindau (VHL) syndrome, Alzheimer's disease, stroke, tuburous sclerosis, Lindau (VHL) syndrome, Multiple sclerosis, ataxia-telangiectasia, Lesch-Nyhan syndrome, multiple sclerosis, ataxia-telangiectasia, clenkodystrophies, behavioural disorders, addiction, anxiety, pain, neuroprotection, diabetes, renal artery stemosis, interstitial nephritis, of glomerulonephritis, polycystic kidney disease, systemic lupus cerythematosus, renal tubular acidosis, immunoglobulin (Ig) A nephropathy, hypercalcaemia, cirrhosis, transplantation, asthma, emphysema cirrhosis, transplantation, asthma, emphysema cirrhosis, transplantation, asthma, emphysema, dull respiratory distress syndrome (ARDS), graft versus coleroderma, adult respiratory distress syndrome (ARDS), graft versus host disease (GYHD), lymphedema, fertility, panoreatitis, obesity, haemophilia, ulcers, anaemia, cancer, trauma, regeneration, and viral, bactesial or parasitic infections. The present sequence is a real-time cyntession of a NOVX mRNA 0 cardiovascular, antiarteriosclerotic; hypotensive; cytostatic; anorectic; antidiabelic; immunosuppressive; anti-HIV; neuroprotective; nociropic; antiparkinsonian; antiasthmatic; antidifertility; cardiomyopathy; atherosclerosis; hypertension; cancer; obesity; diabetes; AIDS; multiple solerosis; graft-versus-host disease; Alzhaimer; disease; Parkinson's disease; asthma; fertility disorder; chromosome mapping; tissue typing; preventive medicine; pharmacogenomic; vaccine; probe; ss. associated disorders in humans, and in the manufacture of a medicament Gaps 0; 1.0%; Score 17.6; DB 1; Length 26; 33.3%; Pred. No. 2.7e+02; 4; Indels Sequence 26 BP; 10 A; 9 C; 4 G; 3 T; 0 U; 0 Other; Novel human nucleic acid NOVX gene probe Ag941. 0; Mismatches 972 ACACCGAGACCTCAAGCCCCAGAA 995 1 ATACCGAGACCTGAAACCCCACAA 24 200205-0385615P 200205-0385755P 200205-0386041P 200205-0386355P 200205-038635P 200205-0386447P 200205-0386447P 200205-0386465P ADH42900 standard; DNA; 26 BP 04-JUN-2003; 2003WO-US017573 Local Similarity 83.3%; les 20; Conservative (first entry) WO2003102159-A2. Homo sapiens 04-JUN-2002; 04-JUN-2002; 06-JUN-2002; 06-JUN-2002; 05-JUN-2002; 25-MAR-2004 11-DEC-2003 ADH42900; Query Match Best Local Matches RESULT 117 ADH42900 g 8

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The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect mismatch, antisense match or antisense wismatch. Also disclosed is a method of gene expression analysis. The array is used in analysis of genetic variation or in hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dotblot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly
                                                                                                                                                                                                                                                                                                                                                                                                                              New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
                 EST; ss; probe; expressed sequence tag; microarxay; gene expression; genetic variation; biallelic marker; polymorphism; human; cross-species comparison.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 25 BP; 4 A; 4 C; 7 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                from USPTO at segdata.uspto.goc/seguence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 83985; 9pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1056 GTCAATCCCAACAAGACATACTC 1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human gene specific PCR primer #960.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCAAACCTAAGAAGACCTACTC 2
                                                                                                                                                                                                                          15-MAR-2002; 2002US-00098263.
                                                                                                                                                                                                                                                                  16-MAR-2001; 2001US-0276759P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 1.0%;
Best Local Similarity 83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABK66872 standard; DNA; 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20; Conservative
                                                                                                                                                                                                                                                                                                         (AFFY-) AFFYMETRIX INC
                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-567953/53.
                                                                                                                                        JS2003104410-A1
                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-JUL-2002
                                                                                                                                                                                 05-JUN-2003
                                                                                                                                                                                                                                                                                                                                                 Mittmann MP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABK66872;
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              EST;
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The invention features to producing a sub-population.

acids (WAs) comprising contacting a NA sample from a physiological conditions to enzymatically generate sub-population of NAs, where each gene specific primer has a sequence complementary to a distinct mRNA, and each labeled NA is generated using a single gene specific primer. The method is useful for producing a sub-population of labeled NAs which is useful for analysing the differences in the RNA profiles between several different physiological sources, where the method comprises producing cuspopulation of labeled NAs for the different physiological sources, comprising the populations for each physiological sources, comprising the population, where the comparison is preferably differences in the population, where the comparison is preferably comprising the patterns for each of the distinct physiological sources to an array of probe NAs stably associated with the surface of a substrate to produce a hybridisation pattern for each of the sources, where confiferential gene expression assays and comparing the patterns for each of the sources, where confiferential gene expression assays are utilised in differential confidence data for this patent of the mornal tissue e.g. neoplastic a normal cissue, or different tissue or sublissue types. The present sequence is a human gene specific PCR primer used in the method of the invention. Note:

The sequence data for this patent did not form part of the printed produced the contract of t
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Producing sub-population of labeled nucleic acids, useful for analyzing differences in RNA profiles between several different physiological sources, using set of distinct gene specific primers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, ss; NOVX; adrenoleukodystrophy; haemophilia; stoke; VHL; PCR; congenital adrenal hyperplasia; haemophilia; hypercoagulation; idiopathic thrombocytopaenic purpura; autoimmune disease; allergy; immunodeficiencies; transplantation; Von Hippel-Lindau syndrome; Alzheimer's disease; tuburous sclerosis; Parkinson's disease; epilepsy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to producing a sub-population of labeled nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       at http.wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.0%; Score 17.6; DB 1; Length 26; 83.3%; Pred. No. 2.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 26 BP; 10 A; 5 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                              Bibilashvilli R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RTQ-PCR probe #2 for human protein NOV19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 3; SEQ ID NO 960; 11pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 826 TCCCTCACCCTTGTCTTTGAGTAC 849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTGTCACCCTTGTCCTTGAGTGC 2
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                                                                                                                                                                                   99US-00225928
                                                                                                                                                                                                                                     97US-00859998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 83.3<sup>3</sup>
Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                              Jokhadze G,
                                                                                                                                                                                                                                                                                         (CLON-) CLONTECH LAB INC
                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-314699/35
                        Homo sapiens
                                                                          US6352829-B1
                                                                                                                                                                                   05-JAN-1999;
                                                                                                                                                                                                                                     21-MAY-1997;
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                                                                                                                               05-MAR-2002
                                                                                                                                                                                                                                                                                                                                                Chenchik A,
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Gaps

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4; Indels

1.0%; Score 17.6; DB 1; Length 25; 33.3%; Pred. No. 2.6e+02;

0; Mismatches

Primer; ss; DNA microarray; differential expression analysis; human.

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Sequence 25 BP; 7 A; 11 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                         Example 2; Page 533; 718pp; English.
                                                 28-JAN-2002; 2002EP-00001167
                                                                                               (AEOM-) AEOMICA INC
                                                                                                               WPI; 2002-676582/73
                                                             30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                         30-JAN-2001;
30-JAN-2001;
23-MAY-2001;
09-OCT-2001;
                                EP1229046-A2.
                                                          30-JAN-2001;
                         Homo sapiens
                                         07-AUG-2002
                                                                                                        Zhan J;
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2001WO-US000664. 2001WO-US000665. 2001WO-US000667. 2001WO-US000668. 2001WO-US000669.

2001US-00864761 2001US-0327898P

The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, an analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one or more nucleic acids to at least two or more nucleic acid probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring or family members of a gene and a cross-species comparison. Bach of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dot-blot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; New array of nucleic acid probes, useful for in situ hybridization, Southern, Northern or dot-blot hybridization to identify or detect t sequence or specific mutations of any gene. 0 1.0%; Score 17.6; DB 1; Length 25; 33.3%; Pred. No. 2.6e+02; ve 0; Mismatches 4; Indels Human microarray DNA oligonucleotide SEQ ID NO 127250. Human microarray DNA oligonucleotide SEQ ID NO 83985. Sequence 25 BP; 8 A; 4 C; 5 G; 8 T; 0 U; 0 Other; data for this patent can also be obtained in e from USPTO at segdata.uspto.goc/sequence.html Claim 1; SEQ ID NO 127250; 9pp; English. 817 TTATGCGACATGACATTGTTCACA 2 TTACGCTACATGACATTATCCACA BP 16-MAR-2001; 2001US-0276759P 15-MAR-2002; 2002US-00098263 83.3%; 25 14-OCT-2003 (first entry) Query Match 1.0 Best Local Similarity 83.3 Matches 20; Conservative cross-species comparison. ACI83994 standard; DNA; (AFFY-) AFFYMETRIX INC. WPI; 2003-567953/53. US2003104410-A1. Homo sapiens. Mittmann MP; 05-JUN-2003 794 ACI83994; RESULT 114 ACI83994/ EXPXEXE à a 0; The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10pl2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human functions. Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL. HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis sxpressed Patched like protein; testis; adrenal; liver; hade germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss. Gaps . 0 1.0%; Score 17.6; DB 1; Length 25; 13.3%; Pred. No. 2.6e+02;

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Gaps

4; Indels

0; Mismatches

83.3%;

20; Conservative

Matches

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Local Similarity

Query Match

218 GCCTGGATGAGAGTGGTGGTG 241

25 GCCAGGATGTTAGTGATGGTGGTG 2

ACK27269 standard; DNA; 25

RESULT 113 ACK27269/c

(first entry)

14-OCT-2003

ACK27269;

DXXXX

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The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and/or amount specifically of hODMLP proteins, as specific blomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hODMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The disorder associated with the expression of hODMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                             New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                         Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 25 BP; 2 A; 12 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                       Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 15296; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   556 CTCAGCCGCCTCCGTCGTGTC 579
                                                                                                                                                                                                                                                                                                                                                     Hanzel DK,
                                  2000US-0236359P.
2000GB-00024263.
                                                                                                                                                                                             2001WO-US000667.
2001WO-US000668.
                                                                                                                                                                                                                                  2001WO-US000669.
2001WO-US000670.
                                                                            2001WO-US000661
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Matches 20; Conservative
                                                                                                                                                                                                                                                                                                                                                         Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                              30-JAN-2001; 2
30-JAN-2001; 2
05-FEB-2001; 2
                                                     04-OCT-2000;
30-JAN-2001;
                                                                                          30-JAN-2001;
                                                                                                                               30-JAN-2001;
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                                                                                                                                                                      30-JAN-2001;
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                                                                                                                                                                                                                 30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                     Ji Y,
                                     27-SEP-2000;
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Shannon ME;

Human HTPL scanning oligonucleotide SEQ ID 3580. Query Match RESULT 112 ABV82334/c Matches à g BXXXXX ö Gaps Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; ö 1.0%; Score 17.6; DB 1; Length 25; 13.3%; Pred. No. 2.6e+02; 4; Indels Human HTPL scanning oligonucleotide SEQ ID 3583. crcarccrcagarcarcardre 24 ABV82337 standard; DNA; 25 (first entry) 03-JAN-2003 ABV82337; ABV82337/ 

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The present invention relates to human testis expressed Patched like protein (HTPL, see ABY78759 to ABY78762 and ABB98519 to ABB98520). HTPL brotein (HTPL, see ABY78759 to ABY78762 and ABB98519 to ABB98520). HTPL brotein (HTPL, see ABY78759 to ABY78762 and ABB98520). HTPL chas two isoforms, with a few single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shares are overall structures erganisation with the Patched protein. The chard structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10pl2.1 HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in thereby and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and such all liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnosic markers and potential therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example form.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.0%; Score 17.6; DB 1; Length 25; 83.3%; Pred. No. 2.6e+02; ative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 25 BP; 6 A; 11 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          216 AGGCCTGGATGAGAGTGGTGG 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; Page 533; 718pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24 AGGCCAGGATGTTAGTGATGGTGG 1
                                                                                                                                                                                                                                                                        2001WO-US000664
2001WO-US000667
2001WO-US000667
2001WO-US000668
2001WS-US000668
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                                                                                                                                                                                                                 28-JAN-2002; 2002EP-00001167
                                                                                                                                                                                                                                                                                                                                                                                                            2001US-0327898P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   example from the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-676582/73.
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                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                   30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                            09-OCT-2001;
                                                                                    Homo sapiens
                                                                                                                            EP1229046-A2
                                                                                                                                                                                                                                                       30-JAN-2001;
                                                                                                                                                                                                                                                                               30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                     23-MAY-2001;
                                                                                                                                                                      07-AUG-2002
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                                                                                                                                                                       This oligonucleotide was designed to amplify the region of homology in insulin receptor and IRR. It was used with another kinase homology domain sulin receptor and IRR. It was used with another kinase homology domain-based primer (see AAVOS14) in the amplification of human LIM-kinase ILIMKL) sequences. The LIMK1 gene is composed of 16 exons (see AAVOS315 and AAT99599-T99629) and is located 15-4 kb 3' of elastin in chromosome 7. It encodes a novel protein kinase (see AAW46576). Williams syndrome cognitive profile (WSCP) is detected by determining zygosity of the LIMK1 constructive cognition. Chromosome 7 deletion analysis allows discrimination between WSCP, SVAS (supra-vascular aortic stenosis) and
                                                                                              Diagnosing Williams syndrome cognitive profile from hemi-zygosity of LIMX1 - gene on chromosome 7 encoding new kinase, allowing differentiation from classic Williams syndrome and supra-vascular aortic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            muscle, myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human GDMLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15294.
                                                                                                                                                                                                                                                                                                                                                                .
                                                                                                                                                                                                                                                                                                                                        1.0%; Score 17.6; DB 1; Length 25; 83.3%; Pred. No. 2.6e+02; ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                      Sequence 25 BP; 4 A; 6 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                    1033 GACTTTGGCCTGGCCCGAGCCAAG 1056
                                                                                                                                                                                                                                                                                                                                                                                                         GACTTTGGGCTGGCTCGAGACATG 24
                                                                                                                                                    Example 3; Page 22; 62pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-MAY-2000; 2000US-0207456P.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
04-0CT-2000; 2000US-00024263.
30-JAN-2001; 2001WO-US000661.
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30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
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2001WO-US000667.
           96US-00678039.
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                             (UTAH ) UNIV UTAH RES FOUND.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                20; Conservative
                                                     Keating MT, Morris CA;
                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                          WPI; 1998-101185/09
                                                                                                                                                                                                                                                                                                 Williams syndrome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200192524-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001;
           10-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-DEC-2001
                                                                                                                                stenosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABN15302;
                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 109
ABN15302
                                                                                                                                                                                                                                                                                                                                                                Matches
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used as immunogens to raise antibodies that specifically recognise hGDMLD-
loroteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific bionolecule capture probes for surface-enhanced laser description ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes a human genome-derived myosin-like protein and polynuclectide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
                                                                                                                                                                                                                                                                                                                                                                                                                            New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        or as specific biomolecule capture probes for surface-enhanced laser descrption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human GDMLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15296.
                                                                                                                                                                                                                                                                              Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
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                                                                                                                                                                                                                                                                              Chen W,
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                                                                                                                                                                                                                                                                              Hanzel DK, Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 15294; 214pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
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30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US00669.
30-JAN-2001; 2001WO-US00670.
05-FEB-2001; 2001US-0266860P.
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                                                                                                                                                                                                                                                                              Gu Y, Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-179446/23.
                                                                                                                                                                                                     (AEOM-) AEOMICA INC
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Best Local Similarity
Matches 20; Conserv
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This invention relates to a novel method for generating histocompatible tissues for transplantation and cell therapy using nuclear transplantation cloning. Specifically, it refers to producing tissue engineered constructs with a desired genetic type, which comprises contacting either the inner cell mass, morula, embryonic stem (ES) cell, adult stem cell or desired differentiated cell with a matrix that adult stem cell or desired differentiated cell with a matrix that call therapy. The present invention of a three-dimensional tissue suitable for cell therapy. The present invention describes a method of therapeutic cloning that could provide a source of cells for regenerative therapy using transgenic mammalian tissue, preferably human. As such, it can be used for the treatment of cancer, burns, heart disease, diabetes, AIDS, liver, skin or corneal disease, as well as spinal cord injury, multiple sclerosis and reproductive or auditory dysfunction. Accordingly, these compositions exhibit cytosteric, dermachological, vulnerary, immunosuppressive, nootropic, antidiabetic, hepatotropic and neuroprotective activities. This oligonucleotide sequence is a PCR primer used to amplify AQPI cDNA for tubule tissue of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                        Producing tissue engineered constructs having a desired genetic type for treating cancer, etc., comprises contacting the inner cell mass, morula, embryonic stem (ES) cell, stem cell, or desired differentiated cell with
dermatological; vulnerary; immunosuppressive; nootropic; antidiabetic; hepatotropic; neuroprotective; AQP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nuclease resistant antisense oligo NBT 55 targeted against parB gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              / Match 1.0%; Score 18; DB 1; Length 26; Local Similarity 80.8%; Pred. No. 2.2e+02; nes 21; Conservative 0; Mismatches 5; Indels
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                                                                                                                                                                                                                                                                  (ADCE-) ADVANCED CELL TECHNOLOGY INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 2; Page 34; 54pp; English.
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                                                                                                                                                                                   23-MAY-2003; 2003WO-US016424.
                                                                                                                                                                                                                         23-MAY-2002; 2002US-0382386P.
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                                                                                                                                                                                                                                                                                                                                               WPI; 2004-035122/03.
                                                                                                    WO2003100011-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   a matrix
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                                                                                                                                                                                                                                                                                                           Lanza R;
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This antisense oligonucleotide is nuclease resistant and can be used in the treatment of animals, including humans, having a bacterial infection. The treatment comprises administration of such nuclease resistant oligonucleotides, targeted to a nucleic acid or protein of the bacterium, and formulated with a carrier. A compound comprising this nuclease cresistant oligonucleotide can be covalently linked to an antibiotic. The method is used to treat infections by wide variety of Gram-positive and Gram-negative, or acid-fast, bacteria, in human and veterinary medicine. The methods are particularly used in immuno-compromised individuals (e.g. patients with acquired immunodeficiency syndrome or those receiving chemotherapy or radiation therapy), optionally in combination with, or fused to antiviral or other antimicrobial oligonucleotides. Apart from therape to allogonucleotides can be used to control bacteria in laboratory cultures, foods, beverages and industrial processes. The oligonucleotides are specific for bacteria, without affecting metabolism on mammalian cells. They may also activate RNase H and have a general, non-specific immune-stimulating effect. The oligonucleotides can be administered orally, intranasally, rectally, topically or by injection, and agent (e.g. carbohydrate or polyamine) that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Williams syndrome cognitive profile; WSCP; cognition; LIM-kinase 1; LIMK1 gene; supra-vascular aortic stenosis; protein kinase; human; PCR;
                                                                                                                                                                                                              Treating bacterial infections in humans or animals with oligo:mucleotide(s) - resistant to nuclease and targetted to bacterial nucleic acid or proteins, also conjugates of these oligo:nucleotide(s) with antibiotics.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.0%; Score 17.8; DB 1; Length 24; 90.5%; Pred. No. 2.3e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 24 BP; 2 A; 6 C; 5 G; 11 T; 0 U; 0 Other;
                                                                                                            (OLIG-) OLIGOS ETC & OLIGOS THERAPEUTICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1435 GAGGATGCCATGAAACATCCA 1455
                                                                                                                                                                                                                                                                                                                    Claim 49; Page 83; 163pp; English.
                                                                                                                                                 Thompson TL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAAGGCCATGAAACATCCA 1
                                   97WO-US012961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97WO-US011687.
                                                                        96US-00685575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kinase domain 5' PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 90.5%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV05313 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-JUL-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     enhances cellular uptake
                                                                                                                                                 Dale RMK,
                                                                                                                                                                                    WPI; 1998-120687/11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-JUL-1997;
                                   23-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9801740-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-JAN-1998.
29-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV05313;
                                                                                                                                                 Arrow A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 108
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The sequence represents a human mammary gland enriched chemokine (MEC) PCR primer. The primer was used in the invention to amplify the coding region of MECR. The invention relates to a novel method for regulating a tumour or adverse bodily reaction, comprising providing a therapeutic composition having a mammary gland chemokine polypeptide. The polypeptide of the invention has cytostatic and antiinflammatory activity. The method of the invention is useful for regulating a tumour or adverse bodily reaction. The invention also provides a method useful for detecting a tumour using a probe comprising the polymoclecide or an antibody to the MEC. The adverse bodily reactions include cancer and inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Determining the presence of neoplastic molecular markers, by identifying the presence of markers in host test sample using array of neoplastic molecular marker specific reagents and analyzing the array of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; cancer; neoplastic disease; tumour specific marker; cytostatic; transcription factor; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                 1.1%; Score 18.6; DB 1; Length 27; 84.0%; Pred. No. 1.8e+02; Live 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.0%; Score 18.2; DB 1; Length 27; ilarity 87.0%; Pred. No. 2.1e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 27 BP; 3 A; 11 C; 9 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                            Sequence 27 BP; 5 A; 7 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human SHH gene PCR primer SEQ ID NO: 289.
                                                                                                                                                                                                                                                                                                                                                  941 GCCTGGCCTACTGCCACCGGCAGAA 965
                                                                                                                                                                                                                                                                                                                                                                                     geeriggeeracragedacadea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 19; 41pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-NOV-2001; 2001WO-US043461.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-NOV-2000; 2000US-0249508P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABT03768 standard; DNA; 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 84.0
Matches 21; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABT03768;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Palm K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 104
ABT03768
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The present invention provides methods and compositions for supplementing or replacing a damaged organ such as kidney, heart, liver, spleen, pancreas, bladder, ureter and urethra. The present sequence is AQPI cDNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New tissue-engineered construct comprising differentiated cells on a three-dimensional biocompatible scaffold, and at least one physiological function of the organ, useful for supplementing or replacing a damaged
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                        Kidney; heart; liver; spleen; pancreas; bladder; ureter; urethra;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PCR primer 1 used to amplify AQP1 cDNA for tubule tissue.
                                                                                                                                                                                                                        organ transplant; immunosuppressive; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 26 BP; 8 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1287 CATCCTGTCCAACGAGGAGTTCAAGA 1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           921 CCTGTTCCAGCTGCTCGTGGCC 943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example; SEQ ID NO 9; 25pp; English.
                          25
                                                                                                                                                                                AQP1 cDNA amplifying PCR primer #1.
               CCTGCTCCAGGTGCACCGTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВР
                                                                                                                                                                                                                                                                                                                                                            05-FEB-2002; 2002US-0355504P.
15-MAR-2002; 2002US-0364863P.
                                                                                                                                                                                                                                                                                                                                  04-FEB-2003; 2003US-00358077.
                                                                                             ADG47704 standard; DNA; 26
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                                                                                                                                                    11-MAR-2004 (first entry)
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Best Local Similarity 80.8
Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                amplifying PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-802871/75.
                                                                                                                                                                                                                                                                            JS2003180268-A1
                                                                                                                                                                                                                                                                                                                                                                                                       (ATAL/) ATALA A
                                                                                                                                                                                                                                                  Unidentified.
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                                                                                                                                                                                                                                                                                                        25-SEP-2003
                                                                                                                          ADG47704;
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Gaps

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Query Match Best Local Similarity Matches 20; Conserva

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Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
                             Example 2; Page 533; 718pp; English
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The present invention relates to human testis expressed Patched like

C protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL

C has two isoforms, with a few single base pair differences between the

two. One of the single base pair changes introduces a premature stop

codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL

Shares an overall structure organisation with the Patched protein. The

shares an overall strongly imply that HTPL plays a role similar

CC shared structural features strongly imply that HTPL plays a role similar

CC to that of Patched, and is a potential tumour suppressor. HTPL is

important in regulating male germ cell development, and the HTPL gene was

CC important for diagnosing a disorder caused by mutation in HTPL, and in

CC useful for diagnosing a disorder caused by mutation in HTPL, and in

CC such disorders associated with decreased expression or activity of human

CHTPL. Such disorders include disorders of testis, or adrenal, adult and

foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,

skeletal muscle or colon function. HTPL proteins and nucleic acids are

clinically useful dispensitic markers and potenial therapeutic agents for

male infertility and cancer. The present oligonucleotide was used in an

ce example from the invention

Sequence 25 BP; 7 A; 11 C; 2 G; 5 T; 0 U; 0 Other;

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Gaps
                                   ·,
1.1%; Score 18.6; DB 1; Length 25; 84.0%; Pred. No. 1.7e+02; Live 0; Mismatches 4; Indels
                                                                216 AGGCCTGGATGAGAGTGGTGGT 240
                                21; Conservative
               Similarity
 Query Match
                  Local
                              Matches
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AGGCCAGGATGTTAGTGATGGTGGT 1

ВР

0;

ACK02038 standard; DNA; 25 (first entry) cross-species comparison 14-OCT-2003 ACK02038; RESULT 102 ACK02038/c 

Human microarray DNA oligonucleotide SEQ ID NO 102019.

EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human;

Homo sapiens

JS2003104410-A1

05-JUN-2003.

15-MAR-2002; 2002US-00098263.

16-MAR-2001; 2001US-0276759P.

(AFFY-) AFFYMETRIX INC

Mittmann MP

WPI; 2003-567953/53.

New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.

Claim 1; SEQ ID NO 102019; 9pp; English

Disclosure; Page 5; 11pp; English

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The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in manitoring gene expression evels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of probes and detecting the hybridisation. The nucleic acid probes are attended to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dottor blot hybridisation to identify or detect the sequence or specific or mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA cross-pression cross-pression containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly contained the containing segments of the containing acid probes incorporated in the microarray. Note: The sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tumour; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Regulating tumor or adverse bodily reaction, involves providing therapeutic composition comprising a mammary gland chemokine, and providing the composition to the tumor or to the area of adverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.1%; Score 18.6; DB 1; Length 25; 34.0%; Pred. No. 1.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, MEC, mammary gland enriched chemokine, chemokine, cytostatic; antiinflammatory; inflammation; PCR; primer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human mammary gland enriched chemokine PCR primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 25 BP; 5 A; 8 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              391 TCGGATGAGGTGCAGTCTCCAGTGA 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25 TAGGATGAGGTGCACCCTCAAGTGA 1
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Matches 21; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Labow MA, Mickanin CS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (LABO/) LABOW M A.
(MICK/) MICKANIN C S.
(BHAT/) BHATIA U.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-187776/24.
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protein 1 (Meannerly) The process and production. The hGDMLP-1 mucleic acids can be used as probes to detect, characterise and quantify mucleic acids can be used as probes to detect, characterise and quantify to browide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as the rapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The concentration and skeleral muscle disorders. hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeleral muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from MIPO
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polynucleotide sequences of hGDMLP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 18.6; DB 1; Length 25; Pred. No. 1.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 25 BP; 2 A; 12 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human HTPL scanning oligonucleotide SEQ ID 3581.
                                                                                                                                                                                                                                                                                                                                                                                    at ftp.wipo.int/pub/published pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
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2001WO-US000664.
2001WO-US000665.
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2001US-00864761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.1%;
84.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-JAN-2002; 2002EP-00001167
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
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30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
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23-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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The present invention relates to human testis expressed Patched like

Corporation (HTPL, see ABV78759 to ABV78762 and AB988519 to AB898520). HTPL

Corporations, with a few single base pair differences between the

two. One of the single base pair changes introduces a premature stop

codon in HTPL-S (S for short) compared to HTPL-I (L for long). HTPL

codon in HTPL-S (S for short) compared to HTPL-I (L for long). HTPL

codon in HTPL-S (S for short) compared to HTPL-I (L for long). HTPL

codon in HTPL-S (S for short) compared to HTPL-I (L for long). HTPL

codon in HTPL-S (S for short) compared to HTPL-I (L for long). HTPL

codon in HTPL-S (S for short) compared to HTPL-I (L for long). HTPL

codon in HTPL-S (S for short) compared to HTPL-I (L for long). HTPL

codon in HTPL is

codon in HTPL and in

codon in HTPL and in

codon in HTPL and in

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codon i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human, gene therapy, tumour suppressor, HTPL, chromosome 10p12.1; human testis expressed Patched like protein, testis, adrenal, liver, male germ cell development, bone marrow, brain; kidney, lung; placenta; prostate, skeletal muscle, colon, male infertility, cancer, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.1%; Score 18.6; DB 1; Length 25; 84.0%; Pred. No. 1.7e+02; tive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 25 BP; 7 A; 12 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human HTPL scanning oligonucleotide SEQ ID 3582.
for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            217 GGCCTGGATGAGAGTGGTGGTG 241
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                                                 Example 2; Page 533; 718pp; English.
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30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         example from the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-JAN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 84.0°
Matches 21, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 101
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Gaps

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New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                    The present invention relates to probes which can be used for the measurement of an enzyme. The probes can be used for the measurement of an enzyme participating to the first phase reaction of drug metabolism. The present sequence is a probe shown in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1, heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                Measurement of an enzyme participating to the first phase reaction of drug metabolism, a probe and a kit for it.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human GDMLP-1 25-mer scanning SEQ ID NO:5 sequence SEQ ID NO:15295.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes a human genome-derived myosin-like
                                                                                                                                                                                                                          Query Match
1.1%; Score 18.8; DB 1; Length 28;
Best Local Similarity 90.9%; Pred. No. 1.7e+02;
Matches 20; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                          Sequence 28 BP; 7 A; 9 C; 6 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                               845 AGTACCTGGACAAGGACCTGAA 866
                                                                                                                                                                                                                                                                                                                                  7 AGTACCTGGACAAGGATCTGTA 28
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                                                                     Claim 4; Page 20; 36pp; Japanese.
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2001WO-US000669.
2001WO-US000670.
2001US-0266860P.
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27-SEP-2000;
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                                                                                                                                                                                                                                                                                                                                                                                       RESULT 99
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XERXEXECCCCXS
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                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                  The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its certer match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in analysis of genetic variation or in hybridisation to a DNA library, or an analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one target sequence in the method of analysis comprises of at least one target sequence. The method of analysis comprises of the more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the concleic acids further comprises a tag sequence. The array of nucleic acid further comprises a tag sequence or specific or mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones or specific or additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the containing to this patent can also be obtained in electronic format directly formed them in the microarray. Note: The sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·
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                                                                                                                 New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 25 BP; 7 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 from USPTO at segdata.uspto.goc/seguence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; drug metabolism; enzyme; probe; ss.
                                                                                                                                                                                     Claim 1; SEQ ID NO 39568; 9pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1256 TAGGAACCCCAACTGAGGAGAC 1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human ALDH3 gene probe SEQ ID NO: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 TAGGCACTCCAACTGAGGAGAC 25
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            (AFFY-) AFFYMETRIX INC
                                                                                  WPI; 2003-567953/53
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                                                 Mittmann MP;
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Shannon ME;

Chen W,

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GGCTGACTTTGGCCTGGCC
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                                                                                                                                                                                                                                                            02-JUL-2002; 2002US-00188779
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1..5
/*tag=
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                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                               Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
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modified_base
                                                                              modified base
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                                                                                                                                                                                                                                                                                                                                                                               Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention describes a new antisense oligonucleotide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclindependent kinase 4, specifically hybridises with the nucleic acid encoding cyclin-dependent kinase 4 and inhibits expression of cyclindependent kinase 4. The antisense oligonucleotide is useful for preparing a composition for treating diabetes, infertility or hyperproliferative disorder, e.g., cancer. This sequence represents a human cyclin dependent kinase 4 antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= b
/mod_base= OTHER
/note= "OTHER= Phosphorothioate backbone. All cytidines
are 5-methylcytidines"
                                                                                                                                                             /note= "OTHER= 2'-0-Methoxyethyl (2'-MOE) nucleotides"
                                                                                -O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cytostatic; antidiabetic; antiinfertility; gene therapy; cyclin-dependent kinase 4; diabetes; infertility; hyperproliferative disorder; cancer; antisense technology; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotide, having a sequence targeted to a nuclei
acid encoding cyclin-dependent kinase 4, useful for preparing a
composition for treating diabetes, infertility or hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.1%; Score 19; DB 1; Length 20; 100.0%; Pred. No. 1.1e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cyclin dependent kinase 4 antisense oligonucleotide #9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 180; 90pp; English.
  are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1029 GGCTGACTTTGGCCTGGCC 1047
                                                              /mod_base= OTHER
/note= "OTHER= 2'
                                                         base= OTHER
                                                                                                                         /*tag= c
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19
                                                                                                                                                                                                                                                                                                                                                                                                    Dobie KW
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                                                                                                                                                                                                                                                                                                                      02-JUL-2002; 2002US-00188779
                                                                                                                                                                                                                                                                                02-JUL-2002; 2002US-00188779
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AD126843/C
ID AD126843 standard; DNA; 2C
XX
AC AD126843;
XX
DT 22-APR-2004 (first entry)
XX
XX
Cyclin dependent kinase 4
XX
XX
KW cytostatic; antidiabetic;
XW cyclin-dependent kinase 4
XX
XX
Homo sapiens.
XX
XX
FH Key Location/(
FT modified_base 1..20
FT Modified_base 2..20
FT Modified_base 2..20
FT Modified_base 2..20
FT Modified_base 2..20
FT Modified_base 3..20
FT Modified_base 5..20
FT Modified_base 5..20
FT Modified_base 6..20
FT Modified_base 7..20
FT Modified_base 6..20
FT Modified_base 6..20
FT Modified_base 7..20
FT Modified_b
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19; Conservative
                                                                                                   15. .20
                                           /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disorder, e.g., cancer.
                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                    Dean NM, Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-081710/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                      US2004005567-A1
                    modified base
                                                                                                   modified base
                                                                                                                                                                                                                                           08-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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The invention describes a new antisense oligonucleotide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclindependent kinase 4, specifically hybridises with the nucleic acid encoding cyclin-dependent kinase 4 and inhibits expression of cyclindependent kinase 4. The antisense oligonucleotide is useful for preparing a composition for treating diabetes, infertility or hyperproliferative disorder, e.g., cancer. This sequence represents a human cyclin dependent kinase 4 antisense oligonucleotide.
/mod_base= OTHER
/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
15. .20
                                                                                                                                  /*tag= c
/mod_base= OTHER
/note= "OTHER= 2'-0-Methoxyethyl (2'-MOE) nucleotides"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonucleotide, having a sequence targeted to a nuclei acid encoding cyclin-dependent kinase 4, useful for preparing a composition for treating diabetes, infertility or hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ó
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 19; DB 1; L
Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                         Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 or hypertrophic burn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcoc.Marie-Tooth disease; therapy, mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; PCR; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             scarring such as keloid, adhesion and hypertrophic or hyperscar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.1%; Score 19; DB 1; Length 19; 100.0%; Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human PCTAIRE protein kinase 1 DNA specific PCR probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 1 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 100.0%; Pred. No. 1.1
Matches 19; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                            Example 1; Page 105; 408pp; English
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/mod_base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAL61694 standard; DNA; 19 BP
                                                         26-OCT-2000; 2000WO-US029500.
                                                                                                 99US-0161532P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                               Tritz R;
                                                                                                                                                                                                                     WPI; 2001-300427/31.
                                                                                                                                       (IMMU-) IMMUSOL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified_base
                                                                                                 26-OCT-1999;
                                                                                                                                                                             Robbins JM,
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                03-MAY-2001
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                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mod_base= OTHER /note= "OTHER= Phosphorothioate backbone. All cytidines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cytostatic, antidiabetic; antiinfertility; gene therapy;
cyclin-dependent kinase 4; diabetes; infertility;
hyperproliferative disorder; cancer; antisense technology; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein kinase 1 DNA specific PCR probe. This sequence is used illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 19; DB 1; Length 19; 100.0%; Pred. No. 1.1e+02; Indels:ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cyclin dependent kinase 4 antisense oligonucleotide #161.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
                                                   /note= "TAMRA labelled"
                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 13; Page 71; 104pp; English.
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                 /*tag= b
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             111 CCCGCCGATCGCCATGGAT 129
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                                                                                                                                                             06-DEC-2002; 2002WO-US039138
                                                                                                                                                                                                 07-DEC-2001; 2001US-00017621
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 100.
Matches 19; Conservative
                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                       Roach MP;
                                                                                                                                                                                                                                                                                                           WPI; 2003-577271/54.
                                                                                                                                                                                                                                                                                                                                                                                                      thrombocytopenia.
                                                                                       WO2003049691-A2
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modified_base
modified base
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                                                                                                                           19-JUN-2003
                                                                                                                                                                                                                                                                         Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADI26995;
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which claaves RNA encoding a cytckine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid molecule (II) comprising a promoter operably linked to a cucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (I) can have antipsoriatic, dermacological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, slow be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retining and preventing profile and preventing and preventing province of the property of the property of the contracting and preventing province and province of the contracting and preventing province of the contracting province of the contracting province of the contracting and preventing province of the contracting and preventing province of the contracting and preventing province of the contracting province of the contraction of the contracti
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                                                                                                                                                                                                                                                                                                                                               Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:464.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.1%; Score 19; DB 1; Length 19; 100.0%; Pred. No. 1.1e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           scar. AAH57577 to AAH62099 represent sequexemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 105; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1029 GGCTGACTTTGGCCTGGCC 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GGCTGACTTTGGCCTGGCC
                          26-OCT-2000; 2000WO-US029500.
                                                                                         99US-0161532P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAH58040 standard; DNA; 19
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                                                                                                                                                                                                                    Tritz R;
                                                                                                                                                                                                                                                                                WPI; 2001-300427/31.
                                                                                                                                                     (IMMI-) IMMISOF INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                         26-OCT-1999;
                                                                                                                                                                                                                    Robbins JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDKI, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAAB415 to AAAB6787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                           Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:465.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.1%; Score 19; DB 1; Length 19;
100.0%; Pred. No. 1.1e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 1 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Barber JR, Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 53; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1028 TGGCTGACTTTGGCCTGGC 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  recereactirescriese 19
cdk4 ribozyme binding site #59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAH58041 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                      98US-0110954P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-412314/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                  (IMMO-) IMMOSOL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
es 19; Conserv
                                                                                                                                                                                         WO200032765-A2
                                                                                                                                                                                                                                                                                                                                                                                      04-DEC-1998;
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                                                                                                                              Mammalia
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Best Loca Matches

RESULT 92

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Gaps

;

19

BP

sickle cell retinopathy; ss.

WO200130362-A2 Homo sapiens. Synthetic.

WO200130362-A2

Synthetic

03-MAY-2001

Sequence 29 BP; 10 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

S

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in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nuclaic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one target sequence. The method of analysis comprises of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acid storbes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallalic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dotblot hybridisation to identify or detect the sequence or specific blot hybridisation to identify or detect the sequence or specific acid probes in mapping the 5° termini of mRNA molecules by primer extensions of any gene, in mapping the 5° termini of mRNA molecules by primer extensions or in screening segments of DNA that have been solutional subclones containing segments of DNA that have been nucleic acid probes incorporated in the microarray. Note: The sequence date from USPTO at seqdata.uspto.goc/sequence.html
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Sequence 25 BP; 4 A; 8 C; 5 G; 8 T; 0 U; 0 Other;

Gaps ·. 1.1%; Score 19.2; DB 1; Length 25; 87.5%; Pred. No. 1.3e+02; 3; Indels 0; Mismatches 686 ACAACCTIGIGGCACTCAAGGAGA 709 21; Conservative Similarity Query Match Local Matches à

· 0

RESULT 89

25 ACAACCTTGTGGAACTGGAGGAGA 2

AAZ29517 standard; DNA; 29 AAZ29517

ВР

(first entry) 14-MAR-2000 AAZ29517;

Primer-2 for identification of SA responsive element in AOPRT-L promoter.

Inducible promoter; Thaumatin-like PR-5 related gene; AoPRT-L; primer; non-phytoxic inducing agent; Salicylic acid; SA; BTH; environmental; developmental; GUS construct; multimerisation; SA responsive element; systemic activation; Inverse PCR; IPCR; ss.

Synthetic.

WO9966057-A2

23-DEC-1999

21-JUN-1999;

98GB-00013345. 19-JUN-1998;

(BIOG-) BIOGEMMA UK LTD.

Paul W; Draper J, Kenton P,

WPI; 2000-106107/09

Novel promoters used to control the expression of heterologous genes in transformed plants.

Example 12; Page 40; 67pp; English.

The present DNA sequence is a PCR primer-2, used for the identification and multimerisation of a salicylic acid, SA/BTH responsive element in the APRT-L promoter region. This primer is designed to regions of APRT-L promoter and used along with PCR primer-4 for the construction of GUS fusion constructs

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CBKI, PCNA and Cyclin BI.
Representative examples of ribozyme recognition sites are given in AAA82115 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                                                                                                                                                                                                                         Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New hairpin and hammerhead ribozyme for inhibiting restenosis, cleave RNA encoding a cyclin or cell-cycle dependent kinase other than CDKI, PCNA and Cyclin BI.
                            Gaps
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0
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1.1%; Score 19.2; DB 1; Length 29; 87.5%; Pred. No. 1.5e+02;
                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Length 19; 1.1e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
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0
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                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.1%; Score 19;
100.0%; Pred. No.
                                                     596 GCTTTGGGAAACTGGAGACCTACA 619
                                                                               29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 53; 109pp; English
                                                                             GCTTTTGGAAACTGAATACCTACA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCTGACTTTGGCCTGGCC 19
                                                                                                                                                                                                                              cdk4 ribozyme binding site #60.
                                                                                                                                                  BP
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                                                                                                                                                                                                                                                                                                                                                                   99WO-US028772,
                                                                                                                                                                                                                                                                                                                                                                                             98US-0110954P
                                                                                                                                                 AAA82879 standard; DNA; 19
                                                                                                                                                                                                     (first entry)
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                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                       (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-412314/35
            Best Local Similarity
Matches 21; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                             WO200032765-A2.
                                                                                                                                                                                                                                                                                                                                                                   06-DEC-1999;
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                                                                                                                                                                                                                                                                                                                                        08-JUN-2000.
                                                                                                                                                                            AAA82879;
Query Match
                                                                                                                                                                                                                                                                                    Mammalia
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                          Matches
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                                                                                                                                    AAA82879
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coupled to an exogenous promoter; is at least 30 contiguous bases of a sequence of 2556 bp, fully defined in the specification and is attached to a solid support; is the 2556bp polynucleotide or its modified form; or is a sequence of 2367 bp, fully defined in the specification; a combinant cell comprising the recombinant nucleic acid, where the cell and by promoter; a recombinant cell made by introducing into a murine cellular genome a recombinant nucleic acid encoding at least 20 contiguous amino acids of the 851 amino acid protein; a purified antibody preparation comprising an antibody that selectively binds to the polypeptide over the human disrupted-inschiptophrenia 1 polypeptide, where the alteration substantially reduces or increases full length expression of the polypeptide from the allele encoding a polypeptide, where the alteration substantially reduces or increases full length expression of the polypeptide from the allele, and a method for screening for a compound able to bind to a Discipolypeptide by contacting the Disci polypeptide with the compound; and measuring the ability of the compound to bind to the Discipolypeptide. The discussion of the advanced in gene therapy to treat disorders. The Disci polypeptide are useful for treating senting and an entable and an advanced in gene therapy to treat disorders. The polypeptide are useful for treating senting and allowed and an entable and an advanced and an encoding and an advanced and an entable and an advanced and an entable and an advanced and an entable and an advanced and an advanc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     disorders or unipolar disorders. This polynucleotide sequence represents a splice donor site of the disrupted-in-schizophrenia 1 (Disc 1) gene of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         invention.
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1.1%; Score 19.8; DB 1; Length 24;
31.3%; Pred. No. 94;
Ive 0; Mismatches 2; Indels
G; 2 T; 0 U; 0 Other;
                                                                                              230 GTGGTGGTGGTGCGCAGTGAC 252
                                                                                                                           0
                                                                                                                       GTGGTGGTGGTGCGGCGCGAC
 C;
                                              91.3%;
                                                                21; Conservative
 Sequence 24 BP; 4 A; 14
                                                 Local Similarity
                                                                                                                            24
                                  Query Match
                                                                Matches
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0

Gaps

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Human microarray DNA oligonucleotide SEQ ID NO 51207.
                                                                                                         ACI51216 standard; DNA; 25 BP
                                                                                                                                                                                                                                                                                                            (first entry)
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                                                                                                                                                                                                        ACI51216;
RESULT 87

ACI51216/C

ID ACI55

XX

AC ACI55

XX

DY 13-00

XX

EST;

KW E
          87
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expressed sequence tag; microarray; gene expression; on; biallelic marker; polymorphism; human; cross-species comparison variation; EST; ss; probe; genetic variatio

Homo sapiens.

US2003104410-A1. 05-JUN-2003.

15-MAR-2002; 2002US-00098263.

16-MAR-2001; 2001US-0276759P.

(AFFY-) AFFYMETRIX INC

Mittmann MP;

WPI; 2003-567953/53.

New array of nucleic acid probes, useful for in situ hybridization, Southern, Northern or dot-blot hybridization to identify or detect t sequence or specific mutations of any gene.

English. Claim 1; SEQ ID NO 51207; 9pp; The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its

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perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises, or family members of a gene and a cross species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid brobes is useful in in situ hybridisation, in Southern, Northern or dotblot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termin of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used
                                                                                                                                                                                                                                                                                                                                                        for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at seqdata.uspto.goc/sequence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.1%; Score 19.2; DB 1; Length 25; 87.5%; Pred. No. 1.3e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human microarray DNA oligonucleotide SEQ ID NO 51208.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 25 BP; 5 A; 8 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 51208; 9pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                686 ACAACCTIGIGGCACTCAAGGAGA 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACIS1217 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 87.5
les 21; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-567953/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US2003104410-A1
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase I (also known as PCTAIRE-1, PTCK1 and crK5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase I, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention 

Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;

1.1%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 72; 0; Indels / Match Local Similarity 100.0%; Pred. No. 72; 958 CGGCAGAAGGTGCTACACCG 977 ceccacaácerecracacec 1 20 Query Match Matches 9

ADK17439 standard; DNA; 24 BP ADK17439; ADK17439 RESULT 

(first entry) 06-MAY-2004

Disrupted-in-schizophrenia 1 (Disc 1) splice acceptor site of exon 15.

disrupted-in-schizophrenia 1; Disc 1; RNA polymerase; neuroleptic; nootropic; neuroprotective; gene therapy; schizophrenia; major mental illness; schizoaffective disorder; bipolar disorder;

Unidentified

WO2003099995-A2.

20-MAY-2003; 2003WO-US015741.

24-MAY-2002; 2002US-0383191P.

(MERI ) MERCK & CO INC.

Morris JA, Ma L, Liu Y; WPI; 2004-035115/03 New Disc1 polypeptides, useful for treating schizophrenia, major mental illnesses, schizoaffective disorders, bipolar disorders or unipolar

Disclosure, SEQ ID NO 20; 57pp; English.

The invention relates to a novel purified disrupted-in-schizophrenia 1 (Disc 1) polypeptide comprising at least 8 contiguous amino acids of a sequence of 851 amino acids, fully defined in the specification. The invention further relates to: a recombinant nucleic acid comprising a sequence that either encodes the polypeptide and is transcriptionally coupled to an exogenous promoter, is at least 30 contiguous bases of a sequence of 2556 bp, fully defined in the specification and is attached to a solid support; is the 2556bp polymucleotide or its modified form; or is a sequence of 2367 bp, fully defined in the specification; a

comprises an RNA polymerase recognised by the promoter; a recombinant cell comprises an RNA polymerase recognised by the promoter; a recombinant cell made by introducing into a murine cellular genome a recombinant nucleic acid encoding at least 20 contiguous amino acids of the 851 amino acid protein; a purified antibody preparation comprising an antibody that selectively binds to the polypeptide over the human disrupted-inscribents in polypeptide; a recombinant mouse comprising an alteration in an allele encoding a polypeptide, where the alteration substantially reduces or increases full length expression of the polypeptide from the cauces or increases full length expression of the polypeptide from the polypeptide by contacting the Disci polypeptide with the compound; and measuring the ability of the compound to bind to the Disci polypeptide of measuring the ability of the compound to bind to the Disci polypeptide of measuring the activities. The Disci polypeptide can be used in gene therapy to treat disorders. The Disci polypeptide can be used in gene therapy to treat disorders. The polypeptides are useful for treating schizophrenia, major mental illnesses, schizoaffective disorders, bipolar disorders or unipolar disorders. This polynucleotide sequence represents a splice acceptor site of the disrupted-in-schizophrenia 1 (Disc 1) gene of the invention.

Sequence 24 BP; 4 A; 14 C; 4 G; 2 T; 0 U; 0 Other;

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Gaps

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Gaps .. 0 1.1%; Score 19.8; DB 1; Length 24; 91.3%; Pred. No. 94; 2; Indels 0; Mismatches Query Match 1.1 Best Local Similarity 91.3 Matches 21; Conservative

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ADK17453 standard; DNA; 24 BP ADK17453/c 

ADK17453;

Disrupted-in-schizophrenia 1 (Disc 1) splice donor site of exon 9. (first entry) 06-MAY-2004

disrupted-in-schizophrenia 1; Disc 1; RNA polymerase; neuroleptic; nootropic; neuroprotective; gene therapy; schizophrenia; major mental illness; schizoaffective disorder; bipolar disorder; unipolar; ss

WO2003099995-A2.

04-DEC-2003

20-MAY-2003; 2003WO-US015741.

24-MAY-2002; 2002US-0383191P.

(MERI ) MERCK & CO INC.

Morris JA, Ma L, Liu Y;

WPI; 2004-035115/03.

New Discl polypeptides, useful for treating schizophrenia, major mental illnesses, schizoaffective disorders, bipolar disorders or unipolar disorders

Disclosure; SEQ ID NO 34; 57pp; English.

The invention relates to a novel purified disrupted-in-schizophrenia 1 (Disc 1) polypeptide comprising at least 8 contiguous amino acids of a sequence of 851 amino acids, fully defined in the specification. The invention further relates to: a recombinant nucleic acid comprising a sequence that either encodes the polypeptide and is transcriptionally

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Claim 3; Page 74; 104pp; English
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/note= "Phosphorothioate backbone; All cytidines are 5-
                                                                                                                                                                                                  hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease, therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
                     Gaps
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Length 20;
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disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase i in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
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Pred. No. 72;
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New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                 hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentoas; X-linked Charcor-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
        Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
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                                                        antisense; ss.
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/note= "2'methoxyethyl nucleotides"

/mod base= OTHER

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\*tag=

16. .20

 $not\overline{e} = "2'methoxyethyl nucleotides'$ 

mod\_base= OTHER

\*tag=

/mod\_base= OTHER /note= "Phosphorothioate backbone; All cytidines are 5-

methylcytidines"

Location/Qualifiers

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/\*tag=

The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcott-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligomucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

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Gaps
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Score 20; DB 1; Length 20;
Pred. No. 72;
0; Mismatches 0; Indels
                                          1715 GCCTGAGCCATGTTCACCTG 1734
 20; Conservative
           Local Similarity
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                     Matches
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20

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Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thromboxytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
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                                                                                                                                                                 Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentosa, X-linked Charcot-Marie-Tooth disease, therapy, mental retardation, Wiskott-Aldrich syndrome, dystonia, Parkinsonism;
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                                                                                                                                   Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204150.
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/note= "2'methoxyethyl nucleotides"
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                                                                   AAL61713;
RESULT 82
AAL61713/c
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). PTCKI and CTKS). The antisense oligonuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonuclectide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonuclectide targetted to human PCTAIRE protein kinase 1 DNA. This
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/mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
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Best Local Similarity 100.
Matches 20; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    thrombocytopenia.
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                                                                 modified base
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Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAL61774
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). PTGI and orKs). The antisense oligomouclectied is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, x-linked Charcot-Marie-Tooth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein Kinase I DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to antisense compounds, compositions and methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaemia; retinitis pigmentosa; X-linked Charcot-Marie -Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
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1.1%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 72;
Matches 20; Conservative 0; Mismatches 0; Indels
                                           /note= "2'methoxyethyl nucleotides"
16. .20
                                                                                                                                             /note= "2'methoxyethyl nucleotides
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                331 GTGCACGAGGACTTGAAGAT 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 3; Page 74; 104pp; English
                                                                                                                      base= OTHER
                         'mod_base= OTHER
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Gaps

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Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204211.

Homo sapiens

RESULT 80
ALL61769/
ID AAL61769/
XX AAC AAL6
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XX Huma
XX Huma
XX Huma
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                                                                                                                            The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Addrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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or
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/note= "Phosphorothioate backbone; All cytidines are 5-
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                                             New antisense oligonucleotides for modulating PCTAIRE protein kinase gene expression, particularly useful for treating hyperproliferative neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                              Gaps
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Pred. No. 72;
                                                                                                                                                                                                                                                                                                                                                            0; Indels
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/note= "2'methoxyethyl nucleotides"
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                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 2 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
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100.0%; Pred. No. '..,
0; Mismatches
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/mod_base= OTHER
                                                                                                       Claim 3; Page 74; 104pp; English.
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Best Local Similarity 100.
Matches 20; Conservative
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Freier SM, Roach MP;
                      WPI; 2003-577271/54
                                                                                 thrombocytopenia.
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
1. .5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 3; Page 74; 104pp; English.
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                                                                 06-DEC-2002; 2002WO-US039138
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                                                                                                                                                                                                                                                                     Roach MP;
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19-JUN-2003
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Example 15; Page 73; 104pp; English.
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                disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention
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  sideroblastic anaemia, X-linked Charcot-Marie-Tooth
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100.0%; Pred. No. 72;
iive 0; Mismatches 0; Indels
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16. .20
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                                                                                                                                                           Sequence 20 BP; 4 A; 1 C; 8 G; 7 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                          ATCCACAAACTTCCTGACAC 1
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                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 20; Conserv
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   The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE
                                                                                                                      protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Miskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRB protein kinase in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRB protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are
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compositions
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. 72;
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1. .20
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/mod_base= OTHER
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New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                 hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcoc-Marie-Tooth disease; therapy; mental retardation; Wiskett-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                                                                                                                                                                                               /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
                                                                                                       PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
                                                                                 Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204181.
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16. .20
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                                                                                                                                                                                                                Location/Qualifiers
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                                                                                                                                                                                                                                                                    methylcytidines"
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                     AAL61744 standard; DNA; 20 BP.
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                                                                                                                                                             antisense; ss.
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                                                                                                                                                                                            Synthetic.
                                          AAL61744;
           AAL61744/c
RESULT 74
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for modulating the expression of PCTAIRE protein kinase I (also known as PCTAIRE.), PTCKI and crK5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase I, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia. X-linked Charcot-Marie-Tooth disease, or incontinentia pigment. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention compositions and methods The invention relates to antisense compounds,

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Seguence 20 BP; 3 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                        Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia;
hyperproliferative disease; neurological disease; thrombocytopaenia;
retinitis pigmentose; X-linked Charcot-Marie -Tooth disease; therapy;
mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                 Gaps
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                                                                                                                                                                                                                                              Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204199.
 Length 20;
                               Indels
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Matches 20; Conserv
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OTHER

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/mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
methylcytidines"
                      Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentoses; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204162.
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/note= "2'methoxyethyl nucleotides"
16. .20
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                    /note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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Pred. No. 72;
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100.0%; Pred. No. /L.
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                                                                                                                                                                                                                                                                                                                                                      Roach MP;
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Best Local Similarity
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                                                  modified base
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  sapiens.
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           Synthetic
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XX
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   Homo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
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or
New antisense oligonucleotides for modulating PCTAIRE protein kinase gene expression, particularly useful for treating hyperproliferative neurological disorders for example, mental retardation, or
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100.0%; Pred. No. 72;
1ve. 0; Mismatches 0; Inde
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                                                                                                                                                                                         Claim 3; Page 74; 104pp; English.
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(first entry)

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Addrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                             New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
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Pred. No. 72;
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                                                                                                                                      (ISIS-) ISIS PHARM INC
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for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE
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                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention relates to antisense compounds, compositions and methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
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                               /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
16. .20
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                                                                                                     base= OTHER
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Roach MP;

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          Freier SM,
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                            The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). PTCAIRE.) The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Addrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense eligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                         Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentosa; X-linked Charoot-Marie-Tooth disease, therapy, mental retardation, Wiskott-Aldrich syndrome, dystonia, Parkinsonism, PTCK1; crk5, incontinentia pigmenti; phosphorothioate backbone,
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                                                                                                                                                                                                     Sequence 20 BP; 1 A; 6 C; 8 G; 5 T; 0 U; 0 Other;
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Pred. No.
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           Claim 3; Page 74; 104pp; English.
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Best Local Similarity
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New antisense oligonucleotides for modulating PCTAIRE protein kinase gene expression, particularly useful for treating hyperproliferative neurological disorders for example, mental retardation, or
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/note= "Phosphorothioate backbone; All cytidines are
methylcytidines"
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/note= "2'methoxyethyl nucleotides"
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                                                                                                                                                      Claim 3; Page 75; 104pp; English.
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les 20; Conserv
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Query Match

Matches

AAL61751, RESULT

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Gaps

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retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcott-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'note = "Phosphorothioate backbone; All cytidines are 5-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hyperproliferative disease; neurological disease; thrombocytopaenia; retifinits pigmentosa; X-linked Charcoc-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crK5; incontinentia pigmenti; phosphorothioate backbone;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
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                                                                                                                                                                                                                1.1%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 72;
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Best Local Similarity
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methylcytidines"
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                                      1.1%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 72;
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/note= "2'methoxyethyl nucleotides"
16. .20
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  4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
                                                                          0; Mismatches
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                                                                                                                   CTGCCTGAGGGCTACCTGGA 518
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                                                        Local Similarity
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  BP;
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  Sequence 20
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AAL61731 standard; DNA; 20 BP.

AAL61731,

PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;

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hyperproliferative disease, neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcoc-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
     Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204167.
                                        antisense; ss
                                                                  Key
modified_base
                                                   sapiens.
                                                        Synthetic.
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"Phosphorothioate backbone; All cytidines are 5-

Location/Qualifiers

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methylcytidines"

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCTA and CTKS). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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                                                                                                          /note= "2'methoxyethyl nucleotides"
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                                                                      base= OTHER
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Gaps
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                         ore 20; DB 1; Length 20;
red. No. 72;
Mismatches 0; Indels
Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
                                      Pred. No.
                          Score 20;
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treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsoniam, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein himsense oligonuclectide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention

The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for

Claim 3; Page 74; 104pp; English.

thrombocytopenia.

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New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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/note= "Phosphorothioate backbone; All cytidines are 5-
                                                                   Human, PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaemia; retinitis pigmentosa, X-linked Charcoc-Marie-Tooth disease; therapy; enetal retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                  Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204168.
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/note= "2'methoxyethyl nucleotides"
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/note= "2'methoxyethyl nucleotides"
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modified_base
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                                                                                                                                             Homo sapiens.
                                22-SEP-2003
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methylcytidines'

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Pred. No. 72;
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                                              /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
16. .20
                                                                                                                     /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
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100.0%; Pred. No. /2,
... 0; Mismatches
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                                                                                                                        /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
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Best Local Similarity 100.
Matches 20; Conservative
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                                                                Key
modified base
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                Homo sapiens
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
                                                                New antisense oligonucleotides for modulating PCTAIRE protein kinase I gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.
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.larity 100.0%; Pred. No. 72;
Conservative 0; Mismatches 0; Indels
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                                                                                                                                 Claim 3; Page 74; 104pp; English.
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 (ISIS-) ISIS PHARM INC
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Synthetic.
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE
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live 0; Mismatches
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/*tag=
                                                                                                                                                                    (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                    Roach MP;
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neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonisam, sideroblastic ansemia. X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligomucleotide particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligomucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204146.
                                                                                                                                                                                          Score 20; DB 1; Length 20;
Pred. No. 72;
                                                                                                                                                                                                                          0; Indels
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16. .20
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                                                                                                                                                                                                                                                      14 AAGGATGGACAGGAATGCAG 33
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/mod_base= OTHER
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Best Local Similarity 100.
Matches 20; Conservative
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                                                           The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase I (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligomucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase I, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Addrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are 5-
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16. .20
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100.0%; Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                             149 GGCAGCTGTCAATGACACTC 168
                              Claim 3; Page 74; 104pp; English.
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ID AAL61721 standard; DNA; 20
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/*tag= b
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Best Local Similarity 100.0
Matches 20, Conservative
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thrombocytopenia
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Gaps

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase I (also known as PCTAIRE-1, PTCKI and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase I, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Addrich syndrome, retinitis pigmentosa, dystonia with Parkinsonias, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                               Human, PCTAIRE protein kinase 1, PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thromboxytopaenia; retinitis pigmentosa; K-linked Charcot Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
                                                                                                                                                                                                                                                                                    crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                                                                                                                                 Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204135.
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/note= "2'methoxyethyl nucleotides"
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20 TGCCACCGGCAGAAGGTGCT 1
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                                                                                 AAL61698 standard; DNA; 20
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/mod_base=
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Synthetic.
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a
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                                   Length 20;
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16. .20
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        G; 7 T; 0 U; 0 Other;
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                                 DB 1;
72;
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                                   Score 20;
Pred. No.
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/mod_base= OTHER
                                                                                         6 GCAGCGTAAAGGATGGACAG 25
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           Sequence 20 BP; 2 A; 8 C; 3
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                                                  Similarity
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Best Local S
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AAL61699/c
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Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentosa, X-linked Charcot-Marie -Tooth disease, therapy, mental retardation, Wiskott-Aldrich syndrome, dystonia, Parkinsonism, PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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/note= "Phosphorothioate backbone; All cytidines are
                                    Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204179.
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/note= "2'methoxyethyl nucleotides"
16. .20
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/mod base= OTHER
   22-SEP-2003 (first entry)
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Pred. No. 72;
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16. .20
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Best Local Similarity 100.0%; Pred. No. 72;
                                                                                    Location/Qualifiers
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mod_base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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Pred. No. 72;
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/note= "2'methoxyethyl nucleotides"
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AAL61742 standard; DNA; 20

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(ISIS-) ISIS PHARM INC.
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.), PTCK1 and orK5). The antisense oligonuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Miskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides for modulating PCTAIRE protein kinase gene expression, particularly useful for treating hyperproliferative neurological disorders for example, mental retardation, or
/note= "Phosphorothioate backbone; All cytidines are
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/note= "2'methoxyethyl nucleotides"
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                                                         modified base
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                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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Pred. No. 72;
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            /note= "2'methoxyethyl nucleotides"
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase I (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase I, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention
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methylcytidines"
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neurological disorders for example, mental retardation,
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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                                                                                                                 New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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methylcytidines"
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protein kinase 1, particularly a hyperproliferative disease
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methylcytidines"
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                                                                                                                                                                                                    Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204142.
 to illustrate the method of the invention
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                                      Score 20; DB 1; Length Pred. No. 72;
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/note= "2'methoxyethyl nucleotides"
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                   BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
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Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcoc-Marie-Tooth disease; therapy; mentual retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
                        Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204203.
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Location/Qualifiers

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treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskotr-Aldrich syndromenia, X-linked Charcot-Marie-Tooth with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
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Synthetic.
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ID AAL617
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methylcytidines"
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20; Conservative

Score 20; DB 1; Length 20;

1.1%;

Query Match Best Local Similarity

Best Loca Matches

Indels

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100.0%; Pred. No. 72; ive 0; Mismatches

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            'note = "Phosphorothioate backbone; All cytidines are
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                                                                                                /note= "2'methoxyethyl nucleotides
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100.0%; Pred. No. '-.
'-- 0; Mismatches
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                                                                                base= OTHER
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mod_base= OTHER
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Best Local Similarity
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for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for retating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Toch disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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                                                                                                                                                /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
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PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
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Pred. No. 72;
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Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204170.
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                                                                             Claim 3; Page 74; 104pp; English.
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for modulating the expression of PCTAIRE protein kinase 1 diso known as PCTAIRE1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or an neurological disease. These diseases include thrombocycopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic ansemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA, This sequence is used to illustrate the method of the invention
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          /mod base= OTHER
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07-DEC-2001; 2001US-00017621.
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Gaps

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treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich schormome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligomuclectide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonuclectide targetted to human PCTAIRE protein kinase 1 DNA. This
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/note== "Phosphorothioate backbone; All cytidines are 5-
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                                                                                                                                                                                                                                                                                                                                                               Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
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                                                                                                           sequence is used to illustrate the method of the invention
                                                                                                                                                    1.1%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 72; ive 0; Mismatches 0; Indels
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16. .20
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Best Local Similarity
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gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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/note= "Phosphorothioate backbone; All cytidines are
methylcytidines"
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/note= "2'methoxyethyl nucleotides"
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1. .20
                                                                                                                     Claim 3; Page 73; 104pp; English.
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Best Local Similarity 100.0%;
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                                                               thrombocytopenia.
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/note= "Phosphorothioate backbone; All cytidines are 5-
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                                                                                                                                           Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
                                                                                                                       Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204192.
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16. .20
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/mod_base= OTHER
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481 CTACCAGCTGACATCCGGCT
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                                                               AAL61755 standard; DNA; 20
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligomuclecitied is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a protein kinase 1, particularly a hyperproliferative disease or a retardation, Wiskott-Aldrich syndrone, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X.linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligomucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or

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oligonuclectide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                              Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Warie-Toch disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
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/note= "2'methoxyethyl nucleotides"
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                                    Sequence 20 BP; 6 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
                                                               DB 1;
72;
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100.0%; Pred. No. ...
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                                                             Query Match
Best Local Similarity
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(first entry)

22-SEP-2003

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.), PTCK1 and CFK5). The antisense oligonuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonuclectide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonuclectide targetted to human PCTAIRE protein kinase 1 DNA. This
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mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
PTCK1; ork5; incontinentia pigmenti; phosphorothioate backbone;
antisense; ss.
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methylcytidines"
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Pred. No. 72;
0; Mismatches 0; Indels
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/note= "2'methoxyethyl nucleotides"
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                                                                                                                     Location/Qualifiers
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). PTCK1 and orK5). The antisense oligomuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental neurological disease. These diseases include thrombocytopaenia, mental neurological disease. These diseases include thrombocytopaenia, mental netardation, Miskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsoniam, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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/note= "2'methoxyethyl nucleotides"
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/note= "2'methoxy
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for reating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein him. Sequence is used to illustrate the method of the invention
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                   /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
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Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentosa, X-linked Charcot-Marie-Tooth disease, therapy,

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New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or Claim 3; Page 75; 104pp; English. 07-DEC-2001; 2001US-00017621. (ISIS-) ISIS PHARM INC. WPI; 2003-577271/54. thrombocytopenia. modified\_base Freier SM, Homo RESULT 38 AAL61704/ g ⋧ ö The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as FCTAIRE.). FIGHT and CTKS). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a meurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention 5 New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone; /note= "Phosphorothioate backbone; All cytidines are methylcytidines" Gaps ö Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204208. Score 20; DB 1; Length 20; Pred. No. 72; Indels /mod\_base= OTHER /note= "2'methoxyethyl nucleotides" 'note= "2'methoxyethyl nucleotides" Sequence 20 BP; 3 A; 9 C; 4 G; 4 T; 0 U; 0 Other; ö 100.0%; Prec. .... Location/Qualifiers 1465 AGTCTGGGGGAGCGGATCCA 1484 /\*tag= c /mod base= OTHER base= OTHER Claim 3; Page 75; 104pp; English. 20 AGTCTGGGGGAGCGGATCCA 1 AAL61771 standard; DNA; 20 BP. 06-DEC-2002; 2002WO-US039138 1.1%; (first entry) ಹ \*tag= b Best Local Similarity 100. Matches 20; Conservative .20 .20 /\*tag= /mod thrombocytopenia. WO2003049691-A2 Key modified\_base modified base modified base Homo sapiens 19-JUN-2003 22-SEP-2003 antisense; Synthetic.

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as pCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are 5-
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/note= "2'methoxyethyl nucleotides"
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/*tag= b
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Matches 20; Conservative
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/note= "Phosphorothioate backbone; All cytidines are 5-
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  or as research respents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                     Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease; neurological disease, thrombocytopaenia; retinitis pigmentosa, X-linked Charcot-Marie-Tooth disease, therapy; mental retardation, Wiskott-Aldarich syndrome; dystonia; Parkinsonism; PTCK1, crk5, incontinentia pigmenti; phosphorothioate backbone;
                                                                                       Gaps
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                                                                                                                                                                                                                                                 Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204178.
                                                                DB 1; Length 20; 72;
                                                                                      0; Indels
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/note= "2'methoxyethyl nucleotides
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                                        Sequence 20 BP; 7 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
                                                                     100.0%; Pred. .v..
                                                                Score 20;
Pred. No.
 reagents or kits. The
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                                                                         Similarity
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                                                              Query Match
                                                                         Local
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                                                                                                                                                             RESULT 35
AAL61741/
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as

Claim 3; Page 74; 104pp; English

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PCTAIRE-1, PTCKI and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase I, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldarich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
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/note= "Phosphorothioate backbone; All cytidines are
methylcytidines"
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Best Local Similarity 100.00
Thes 20; Conservative
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445 AAGATCTCCACTGAGGACAT

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(first entry)

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Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204163.
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                                                                                                                                                           07-DEC-2001; 2001US-00017621
                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                   WPI; 2003-577271/54.
                                                                                                                                                                                                        chrombocytopenia
                                                                                                                                  WO2003049691-A2
                                                                                                              modified base
                                                 antisense; ss
                                                                        modified base
                                                         Homo sapiens.
           22-SEP-2003
                                                                                                                                                                            Freier SM,
                                                             Synthetic,
                                                                                             modified
   AAL61726;
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3; Page 74; 104pp; English.

Roach MP;

'note = "2'methoxyethyl nucleotides"

/mod\_base= OTHER

'\*tag= b

base

Location/Qualifiers

mod\_base= OTHER

\*tag=

methylcytidines"

/mod\_base= OTHER /note= "2'methoxyethyl nucleotides"

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/\*tag=

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). PTAST and CTKS). The antisense oligonuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a pertoaction can appear to the disease include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigment. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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/note= "Phosphorothioate backbone; All cytidines are 5-
                                                                                                                                                                                                                                                                                                     Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia, retinitis pigmentoses, X-linked Charcoc-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                                                                                                                                                                                                           Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204177.
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/note= "2'methoxyethyl nucleotides"
16. .20
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base= OTHER
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20 AAGATCTCCACTGAGGACAT
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                                                                                                                     AAL61740 standard; DNA; 20 BP
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                                                                                               Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaemia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
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Score 20; DB 1; Length 20; Pred. No. 72;

1.1%; Scor. 100.0%; Pred. No. '-.

Query Match
Best Local Similarity 100.
Matches 20; Conservative

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for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and CTK5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental neurological disease. These diseases include thrombocytopaenia, mental with Parkinsonism, sideroblastic anaemia. X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonuclectide is kinase in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonuclectide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to antisense compounds, compositions and methods
                              /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
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/note= "2'methoxyethyl nucleotides"
16. .20
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                                                                methylcytidines"
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/mod_base= OTHER
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Matches 20; Conservative
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                                          1.1%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 72; 0; Indels tive 0; Mismatches 0; Indels
Sequence 20 BP; 3 A; 4 C; 5 G; 8 T; 0 U; 0 Other;
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(first entry) 22-SEP-2003

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Gaps

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Indels

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1506 CATATTTGCACTAAAGGAGA 1525

20; Conservative

Matches

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Best Local Similarity

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20 CATATTTGCACTAAAGGAGA

AAL61726 standard; DNA; 20 BP

RESULT 33 AAL61726/c ID AAL617;

Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204201.

Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia;

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The invention relates to antisense compounds, compositions and methods for adulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Addrich syndrome, retinitis pigmentosa, dystennia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in continentia pigment. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in calls or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
retinitis pigmentosa, X-linked Charcot-Marie-Tooth disease, therapy, mental retardation, Wiskott-Aldrich syndrome, dystonia, Parkinsonism, PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone,
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/note= "Phosphorothioate backbone; All cytidines are
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16. .20
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Pred. No.
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Score 20;
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                                                                           Claim 3; Page 74; 104pp; English.
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                    (ISIS-) ISIS PHARM INC
                              Roach MP;
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as pCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in calls or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
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                                                                /note= "2'methoxyethyl nucleotides"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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live 0; Mismatches
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Gaps 0;

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PCTAIRE.1, PTCK1 and CTK5). The antisense oligomucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperpoliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsoniam, sideroblastic anaemia, X-linked Charcot Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein or as research reagents or kits. The present sequence is prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
modulating the expression of PCTAIRE protein kinase 1 (also known as
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methylcytidines"
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16. .20
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Best Local Similarity 100.0%; Fred. No. 72;
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                                                                                                                                                                                                                                                                                                              kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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                New antisense oligonucleotides for modulating PCTAIRE protein kinase gene expression, particularly useful for treating hyperproliferative neurological disorders for example, mental retardation, or
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kinase 1 in cells or tissues. It is useful for diagnostics, or as research reagents or kits. The present sequence is an oligonucleotide targetted to human PCTAIRE protein kinase 1 sequence is used to illustrate the method of the invention
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCAIRE and CIAS). The antisense oligomuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retrardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystconia with Parkinsonism, sideroblastic anamenia, X-linked Charcot-Marie-Tooth particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligomuclectide targetted to human PCTAIRE protein kinase 1 DNA. This /mod\_base= OTHER /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines" New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia. nyperproliterative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcoc-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone; sequence is used to illustrate the method of the invention 'note = "2'methoxyethyl nucleotides" /mod\_base= OTHER /note= "2'methoxyethyl nucleotides' hyperproliferative disease; neurological disease; Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other; Location/Qualifiers Claim 3; Page 74; 104pp; English. /mod\_base= OTHER 06-DEC-2002; 2002WO-US039138. 07-DEC-2001; 2001US-00017621. ಗ \*tag= b U 16. .20 /\*tag= c .20 \*tag= (ISIS-) ISIS PHARM INC Roach MP; WPI; 2003-577271/54. WO2003049691-A2 antisense; ss modified\_base modified base modified base Homo sapiens. 19-JUN-2003 Freier SM, Synthetic

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for modulating the expression of PCTAIRE procein kinase 1 (also known as PCTAIRE-1, PTCK1 and CrK5). The antisense oligonucleotide is useful for Treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a retardation kinase 1, particularly a hyperproliferative disease or a retardation, wiskott-Adrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic ansemia. X-linked Charcot-Marie-Tooth disease, or incontinentia pigment. The antisense oligonucleotide is with ase in cells or tissues. It is useful for disposic, prophylaxis, or as research reagents or kinase 1 in cells or tissues. It is useful for disposition of PCTAIRE protein kinase in cells or tissues. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                                                                        invention relates to antisense compounds, compositions and methods
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Pred. No. 72;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
      /note= "2'methoxyethyl nucleotides"
                                                                     /note= "2'methoxyethyl nucleotides"
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                                                                                                                                                                                                                                                                                                                                                                                                              Claim 3; Page 75; 104pp; English.
                                                        /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP
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                                                                                                                                                                                                    07-DEC-2001; 2001US-00017621.
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                        16. .20
                                         /*tag=
                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                   Roach MP;
                                                                                                                                                                                                                                                                                               WPI; 2003-577271/54.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                thrombocytopenia
                                                                                                        WO2003049691-A2
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as CC for modulating the expression of PCTAIRE protein kinase 1 (also known as CC treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a central disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aidrich syndrome, retinitis pigmentosa, dystonia retardation, Wiskott-Aidrich syndrome, retinitis pigmentosa, dystonia cuth parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein can a research reagents or kiss. The present sequence is an antisense cligonucleotide targetted to human PCTAIRE protein kinase 1 bnA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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/note= "2'methoxyethyl nucleotides"
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                                                                                                                                                                        OTHER
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/mod_base= OTHER
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Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease, neurological disease, thrombocytopaemia, retinitis pigmentosa, X-linked Charcot-Marie-Tooth disease, therapy, mental retardation, Wiskott-Aldrich syndrome, dystonia, Parkinsonism,
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      WPI; 2003-577271/54
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Synthetic.
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AAL61765/c
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BP.

(first entry)

/note= "2'methoxyethyl nucleotides" 16. .20

location/Qualifiers

\*tag=

methylcytidines" /\*tag= b /mod\_base= OTHER note = "2'methoxyethyl nucleotides"

mod base= OTHER

WO2003049691-A2

19-JUN-2003

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/\*tag=

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0; Indels

0; Mismatches

100.08;

Score 20; DB 1; Length 20; Pred. No. 72;

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for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                      New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
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/mod_base= OTHER
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                      06-DEC-2002; 2002WO-US039138
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Best Local Similarity 100...
Thes 20; Conservative
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modified_base
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AAL61768/c
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                                                                                                                                                                         The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). The antisense oligomucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligomucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligomucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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                           New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
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/note= "Phosphorothioate backbone; All cytidines are 5-
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22-SEP-2003
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Best Local 8
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particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                          /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
                                                                                                                                                                                                                                                         Human, PCTAIRE protein kinase 1, PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaemia; retinitis pigmentosa, X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                                                Gaps
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                                                                                                                                                                                                                                        Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204191.
                                                                            DB 1; Length 20; 72;
                                                                                               0; Indels
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/note= "2'methoxyethyl nucleotides"
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16. .20
                                                          Sequence 20 BP; 3 A; 5 C; 8 G; 4 T; 0 U; 0 Other;
                                                                            1.1%; Score 20; DB
100.0%; Pred. No. 72;
ive 0; Mismatches
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/mod_base= OTHER
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                                                                                Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                          Synthetic.
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinsse 1 (also known as pCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinsse 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retradation, Wiskott-Aidrich syndrome, retinitis pigmentosa, dystonia retardation, Wiskott-Aidrich syndrome, retinitis pigmentosa, dystonia retardation, Wiskott-Aidrich syndrome, retinitis pigmentosa, dystonia particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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/note= "2'methoxyethyl nucleotides"
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/note= "2'methoxyethyl
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/*tag= c
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Pred. No.

100.08;

Best Local Similarity

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'note= "Phosphorothioate backbone; All cytidines are 5-
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                                                                                        Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                                                     Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204174.
                                                                                                                                                                                                                                                                                                 "2'methoxyethyl nucleotides'
                                                                                                                                                                                                                                                                                                                                         'note= "2'methoxyethyl nucleotides'
                                                                                                                                                                                                     Location/Qualifiers
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                                                                                                                                                                                                                                                                                     'mod_base= OTHER
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        AAL61737 standard; DNA; 20 BP
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16. .20
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                                                                                                                                                                             Synthetic.
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AAL61737/c
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Miskott-Additch syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anamemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This oligonucleotide targetted to human PCTAIRE protein kinase 1 sequence is used to illustrate the method of the invention

20 BP; 1 A; S C; S G; 9 T; 0 U; 0 Other;

DB 1; Length 20;

1.1%; Score 20;

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Sequence
                  Query Match
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                                                                                                                                                                                                                                                   Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia, hyperproliferative disease, neurological disease, thrombocytopaenia, retinitis pigmentose, X-linked Charcoc-Marie-Tooth disease, therapy, mental retardation, Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
       Gaps
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/note= "Phosphorothioate backbone; All cytidines are
methylcytidines"
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                                                                                                                                                                                                                        Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204187.
      Indels
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/note= "2'methoxyethyl nucleotides"
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                                                          GGCAAAAGCAAGCTCACAGA 1
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Matches
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.) FTKI and crk5). The antisense oligomucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neural disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot Warie-Tooth disease, or incontinentia pigmenti. The antisense oligomucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligomucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                 /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
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/note= "2'methoxyethyl nucleotides"
16. .20
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           Location/Qualifiers
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es 20; Conserv
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as pCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retradation, wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia retardation, wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in calls or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
Human, PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
                                                                                                                                                                                                                                                             'note = "Phosphorothioate backbone; All cytidines are
                                                                        PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
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16. .20
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                                                                                                                                                                                        Location/Qualifiers
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/*tag= a
/mod_base= OTHER
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Gaps

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1.1%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 72; ive 0; Mismatches 0; Indels

1.1., 100.08; PIC

Local Similarity tes 20; Conserv

Query Match Matches

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Gaps ·, CTGAGGACATCAACAAGCGC 474

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CTGAGGACATCAACAAGCGC

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                                                                                                                                                     New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
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/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
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Pred. No. 72;
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                                                    07-DEC-2001; 2001US-00017621.
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  19-JUN-2003
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Synthetic.
                                                                                                      Freier SM,
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase I (also known as PCTAIRE, I, PTCK1 and CTK5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase I, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Miskott-Aldrich syndrome, retinitis pigmentosa, dystconia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase I in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This
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gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
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/mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
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1es 20; Conservative
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ine invention tendres to distribute, compositions and microbust for modulating the expression of PCTAIRE protein kinase I (also known as PCTAIRE.1, PVCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase I, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pygmentose, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinents pygmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase I DNA. This
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         compositions and methods
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                                                                                                                                                                                                                  sequence is used to illustrate the method of the invention
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Pred. No. 72;
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             compounds,
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                invention relates to
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as for modulating the expression of PCTAIRE protein kinase 1 (also known as CC treating an animal having a disease or condition associated with PCTAIRE CC treating an animal having a disease or condition associated with PCTAIRE crotein kinase 1, particularly a hyperproliferative disease or a certardation, wiskott-Aidrich syndrome, retinitis pigmentosa, dystonia retardation, wiskott-Aidrich syndrome, retinitis pigmentosa, dystonia disease, or incontinentia pigmenti. The antisense oligonucleotide is daease, or incontinentia pigmenti. The antisense oligonucleotide is constraintly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense cligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This considerate the method of the invention
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/note= "Phosphorothioate backbone; All cytidines are 5-
                                  New antisense oligonucleotides for modulating PCTAIRE protein kinase I gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.
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/note= "2'methoxyethyl nucleotides"
16. .20
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                                                                                                                                Claim 3; Page 75; 104pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 GTCTTCGTCGATGCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAL61772 standard; DNA; 20 BP.
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/*tag= b
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/mod base=
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          WPI; 2003-577271/54.
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modified_base
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AAL61772/c
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Gaps

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are 5-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocycopenia.
                                                                                                                                                                                                                                                                         Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcochamier-Toch disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCKI; crk5; incontinentia pigmenti; phosphorothioate backbone;
                                   .
                                                                                                                                                                                                                                              Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204186.
1.1%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 72; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'note= "2'methoxyethyl nucleotides
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                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                          ACGAGGACTTGAAGATGGGG 354
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                                                                            ACGAGGACTTGAAGATGGGG 1
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             Similarity
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                                                                                                                                                                                                                                                                                                                                                      antisense; ss.
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                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
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                                                        335
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Query Match
                Local
                           Matches
                                                                                                                              RESULT 10
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            particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonuclectide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
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gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                                                                    hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
or incontinentia pigmenti. The antisense oligonucleotide is
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/note= "Phosphorothioate backbone; All cytidines are
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                                                                                                                                                  ·,
                                                                                                                                                                                                                                                                                                                                              Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204196.
                                                                                                                       DB 1; Length 20; 72;
                                                                                                                                                  Indels
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                                                                                         Sequence 20 BP; 7 A; 2 C; 7 G; 4 T; 0 U; 0 Other;
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                                                                                                             1.1%; Scor.
100.0%; Pred. No. /c,
... 0; Mismatches
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/mod_base= OTHER
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                                                                                                                 Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                           antisense; ss.
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AAL61720 standard; DNA; 20 BP

AAL61720/c RESULT 9

The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as pCTAIRE-1, PTCK1 and crk5). The antisense oligonucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a currenclogical disease. These diseases include thrombocytopaenia, mental cretardation, wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia. X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein con as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or /note= "Phosphorothioate backbone; All cytidines are 5-Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaemia, retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Miskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone; /mod\_base= OTHER /note= "2'methoxyethyl nucleotides" /note= "2'methoxyethyl nucleotides" BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other; Location/Qualifiers Claim 3; Page 74; 104pp; English. /mod\_base= OTHER base= OTHER methylcytidines" 06-DEC-2002; 2002WO-US039138 07-DEC-2001; 2001US-00017621 Ω. υ 16. .20 \*tag= (ISIS-) ISIS PHARM INC. . 20 \*tag= \*tag= Roach MP; mod/ WPI; 2003-577271/54. thrombocytopenia. WO2003049691-A2 antisense; ss Key modified base modified base modified base sapiens. Sequence 20 19-JUN-2003 Freier SM, Synthetic. Ното

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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as C for modulating the artisense oligomucleotide is useful for traating an animal having a disease or condition associated with PCTAIRE CC treating an animal having a disease or condition associated with PCTAIRE CC protein kinase 1, particularly a hyperproliferative disease or a currendical disease. These diseases include thrombocytopaenia, mental creatadation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein cor as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                                                                                                                                                                                                           5
                                                                                                         Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease, neurological disease, thrombocytopaenia; retinitis pigmentosa, X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
                                                                                                                                                                         PTCK1; crk5; incontinentia pigmenti; phosphorothicate backbone;
                                                                          Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204157.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                              /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 3 A; 9 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                               Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   base= OTHER
                                                                                                                                                                                                                                                                                                                                                                   methylcytidines"
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                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Roach MP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          thrombocytopenia.
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                                                                                                                                                                                                                                                                                      Key
modified base
                                                                                                                                                                                                                                                                                                                                                                                     modified base
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                                                                                                                                                                                                      antisense; ss
                                                                                                                                                                                                                                   Homo sapiens.
                                                  22-SEP-2003
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                                                                                                                                                                                                                                                     Synthetic.
                 AAL61720;
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Gaps

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1.1%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 72; ive 0; Mismatches 0; Indels

273 IGCIGCICCIGGGGAACTIC 292

Conservative

20;

Matches

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Similarity

Query Match Best Local S

TGCTGCTCCTGGGGAACTTC 1

20

/\*tag= a /standard\_name= "single nucleotide polymorphism"

Location/Qualifiers

/\*tag=

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contain single nucleotide polymorphisms (SNPs). A method is included in the invention for analysing a nucleic acid sample, which consists of determining the base occupying any one of the polymorphic sites given in the SNP containing sequences. The nucleotide sequences can be used in the diagnosis or monitoring of diseases, such as cancer, inflammation, heart diseases, diseases of the cardiovascular system, and infection by microorganisms. The oligonucleotides are also useful in the manufacture of a medicament for the treatment or prophylaxis of the diseases, and as a pharmaceutical. SNP containing oligonucleotides are useful in she manufacture a pharmaceutical. SNP containing oligonucleotides are useful in medications such as phenotype correlation, forensics, paternity testing, medicine and genetic analysis
                                                                                                                                                                                                                                                                                                                    New nucleic acid segments of the human genome, particularly from genes including polymorphic sites, for phenotype correlation, forensics, paternity testing, medicine and genetic analysis.
                                                                                                                                                                                                                                    (WHED ) WHITEHEAD INST BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 37; 80pp; English.
                                                                                                                                                                               17-NOV-2000; 2000WO-US031639
                                                                                                                                                                                                                                                                Cargill M, Ireland JS,
                                                                                                                                                                                                                                                                                                                                                                                                        DNA sequences AAH62100
                                                                                                                                                                                                                                                                                           WPI; 2001-367705/38.
                                                                                                                         WO200138576-A2
               Homo sapiens
Unidentified
                                                                                                                                                     31-MAY-2001
                                                       Key
variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAL61700;
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- AAH62688 represent segments of human genes which

Lander ES;

99US-0167334P.

Revised record issued on 09-SEP-2004 : Correction to Feature Table Key Gaps .; 0 Score 21; DB 1; Length 21; Indels Sequence 21 BP; 9 A; 4 C; 6 G; 2 T; 0 U; 0 Other; 100.0%; Pred. No. 49; iive 0; Mismatches 1.2%; Query Match
Best Local Similarity 100.0

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AAL61700 standard; DNA; 20 BP 22-SEP-2003 (first entry) Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204137.

Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; phosphorothioate backbone; antisense; ss

Homo sapiens

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/mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are 5-
                                                                                                                                                                                                                                                   New antisense oligonucleotides for modulating PCTAIRE protein kinase I
gene expression, particularly useful for treating hyperproliferative or
neurological disorders for example, mental retardation, or
                                                                                       not\bar{e}= "2'methoxyethyl nucleotides'
                                                                                                                       /note= "2'methoxyethyl nucleotides"
                Location/Qualifiers
                                                                                                                                                                                                                                                                                            Example 15; Page 73; 104pp; English.
                                                        methylcytidines"
                                                                                                               base= OTHER
                                                                              /mod_base= OTHER
                                                                                                                                                                     06-DEC-2002; 2002WO-US039138
                                                                                                                                                                                    07-DEC-2001; 2001US-00017621
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                                                                                                                                                                                                                      Freier SM, Roach MP;
                                                                                                                                                                                                                                     WPI; 2003-577271/54.
                                                                                                                                                                                                                                                                             thrombocytopenia,
                                                                                                                                      WO2003049691-A2
                Key
modified_base
                                                             modified_base
                                                                                             modified_base
Synthetic
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The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). PTCAI and CTK5). The antisense oligomucleotide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a protein kinase 1, particularly a hyperproliferative disease or a retradation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This sequence is used to illustrate the method of the invention

Score 20; DB 1; Length 20; Pred. No. 72; 0; Indels Sequence 20 BP; 2 A; 9 C; 2 G; 7 T; 0 U; 0 Other; Mismatches 46 Match Local Similarity 100.0%; Pr 27 AATGCAGAGGTAGGCAGGAG 20 AATGCAGAGGTAGGCAGGAG AAL61714 standard; DNA; 20 22-SEP-2003 AAL61714; Query Match AAL61714/c Matches ð g XXXXXXXX

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Gaps

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Human PCTAIRE protein kinase l antisense oligo, ISIS 204151. (first entry)

Matches

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RESULT

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The invention relates to the identification of nucleic acid molecules (AAI29513-AAI31314) from the human genome which include polymorphic sites which can predispose individuals to disease. Various genes from a number of individuals were resequenced and single nucleotide polymorphisms (SNPs) in these genes discovered. The method is useful for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes) associated with a particular genotype. The nucleic acids containing the polymorphic sites may be useful in forensics and paternity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nucleic acid molecules from the human genome which include polymorphic sites, useful in methods for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes) associated with a particular genotype.
                                                                                                           Human, resequence, genotype, disease, forensic; paternity testing; single nucleotide polymorphism; SNP; ss.
                                                                                                                                                                                                                                                   /standard_name= "single nucleotide polymorphism"
                                                                            Human single nucleotide polymorphism (SNP) PCTAIRE3 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic acid molecules from the human genome which include polymorphic sites, useful in methods for predicting the presence, absence or severity of a particular phenotype or disorder (e.g. diabetes) associated with a
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Gaps

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DB 1; Length 31; Indels inflammation;

AAI29606 standard; DNA; 31

AAI29606 ID AAI2

RESULT

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The present invention describes medicinal compositions (I) inhibiting beta-amyloid production comprising an active component a substance that inhibits the activity of cyclin-dependent kinase (CDK). Also described are: (1) a method for screening compounds for their ability to inhibit the production of beta-amyloid by contacting with beta-amyloid producing cells; and (2) screening kits. (I) have nootropic and neuroprotective activities. (I) suppress the phosphorylation of amyloid precursor protein (AAPP) which is an essential step in the production of beta-amyloid. (I) can be used in the treatment and prevention of neurodegenerative diseases such as dementia and Alzheimer's disease. The present sequence represents a PCR primer which is used in the exemplification of the present Medicinal compositions for the treatment of dementia and Alzheimer' Human; beta-amyloid; cyclin-dependent kinase inhibitor; nerve cell; amyloid precursor protein; APP; Cdk5; PCR primer; ss. disease, comprise compounds that suppress beta amyloid production Sequence 33 BP; 6 A; 6 C; 11 G; 10 T; 0 U; 0 Other; 1018 GAGCTCAAGCTGGCTGACTTTGGCCTGGCCCG 1049 GAGCTGAAATTGGCTAATTTTGGCCTGGCTCG 33 Human Cdk5 related PCR primer SEQ ID NO:19. Example 6; Page 23; 62pp; Japanese. 81.2%; ABA04100 standard; DNA; 33 (first entry) 26; Conservative WPI; 2002-026209/03. Similarity (SUZU/) SUZUKI T. WO200182967-A1 Homo sapiens 21-FEB-2002 08-NOV-2001 Suzuki T, Query Match ABA04100 Local ABA04100/c Best Loc Matches RESULT à g 

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Score 22.4; Pred. No. 41

1.3%;

DB 1; Length 33; 6; Indels

beta-amyloid production comprising an active component a substance that inhibits the activity of cyclin-dependent kinase (CDK). Also described are: (1) a method for screening compounds for their ability to inhibit the production of beta-amyloid by contacting with beta-amyloid producing eclls; and (2) screening Kits. (1) have nootropic and neuroprotective activities. (1) suppress the phosphorylation of amyloid precursor protein (APP) which is an essential step in the production of beta-amyloid. (1) can be used in the treatment and prevention of neurodegenerative diseases The present invention describes medicinal compositions (I) inhibiting Medicinal compositions for the treatment of dementia and Alzheimer's disease, comprise compounds that suppress beta amyloid production. ŝ Hachiya Kawabata S, Example 6; Page 23; 62pp; Japanese. (YAMA ) YAMANOUCHI PHARM CO LID 28-APR-2000; 2000JP-00131037. 25-APR-2001; 2001WO-JP003555 Watanabe T,

. 0 The present sequence represents Gaps such as dementia and Alzheimer's disease. The present sequence ra a PCR primer which is used in the exemplification of the present ·. Human PCTAIRE protein kinase 1 DNA specific reverse PCR primer. DB 1; Length 33; Indels Sequence 33 BP; 10 A; 11 C; 6 G; 6 T; 0 U; 0 Other; 9 1018 GAGCTCAAGCTGGCTGACTTTGGCCTGGCCCG 1049 32 GAGCTGAATTGGCTAATTTTGGCCTGGCTCG 1 0; Mismatches Score 22.4; 1 Pred. No. 41; BP 1.3%; AAL61693 standard; DNA; 22 (first entry) Conservative Query Match Best Local Similarity Thes 26; Conserve 22-SEP-2003 invention AAL61693; AAL61693/c RESULT 3 8 X G G G à q

Human, PCTAIRE protein kinase 1, PCTAIRE-1, sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy, mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; PCR; primer; ss. 07-DEC-2001; 2001US-00017621. 06-DEC-2002; 2002WO-US039138 (ISIS-) ISIS PHARM INC. Freier SM, Roach MP, WPI; 2003-577271/54. WO2003049691-A2. Homo sapiens. 19-JUN-2003

New antisense oligonucleotides for modulating PCTAIRE protein kinase I gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or thrombocytopenia.

Example 13; Page 71; 104pp; English.

The invention relates to antisense compounds, compositions and methods for modulating the expression of PCTAIRE protein kinase 1 (also known as PCTAIRE.). PTCK1 and CTK5). The antisense oligonuclectide is useful for treating an animal having a disease or condition associated with PCTAIRE protein kinase 1, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Aldrich syndrome, refinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonuclectide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is human PCTAIRE protein. illustrate the method of the invention

DB 1; Length 22; 33; Sequence 22 BP; 3 A; 6 C; 4 G; 9 T; 0 U; 0 Other; 1.3%; Score 22; 100.0%; Pred. No. Query Match Best Local Similarity

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	andard; DNA; 33 1  (first entry)  related PCR prim -amyloid; cyclin cursor protein; sA1. ; 2001WO-JP00355 ; 2000JP-0013103 rANOUCHI PHARM CO UKI T. Watanabe T, Kaw
	099 standard; 1 099;  B-2002 (first cdk5 related i; beta-amyloid id precursor pysapiens.  182967-A1.  V-2001; 2001WO  R-2000; 2000JP  () YAMANOUCHI (/) SUZUKI T.  ii T, Watanabe 2002-026209/03
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cell surface receptor; inflammation; arthritis; autoimmune disease; AIDS; transplant rejection; infection; septicaemia; psychosis; neurological diseorder; Parkinson's disease; Alzheimer's disease; depression; respiratory disorder; asthma; eating disorder; obesity; cardiovascular disorder; ischaemia; cancer; PCR; primer. New recombinant nucleic acid encoding a mammalian SNORF7 receptor for use as a probe and for expressing SNORF7 receptor in transfected cells. to detect the existence of nucleic acids having complementary sequences in samples. They are also used to express SNORF7 receptor in transfected cells. The receptors are also used to design drugs for treating such diseases as inflammation, autoimmune diseases and neurological disorders. The invention relates to mammalian SNORP7 receptors and to nucleic acid molecules encoding such receptors. Polynucleotides of the invention are used as probes to obtain homologous nucleic acids from other species and present sequence is a PCR primer used to identify and isolate human New recombinant nucleic acid comprising a sequence encoding a mammalian SNORF7 receptor, useful for studying the effects of neuroregulators for developing agonists and antagonists for cell surface receptors. Human; GPCR; SNORF7; ss; G protein-coupled receptor; neuroregulator; ch 1.0%; Score 16.6; DB 1; Length 24; l Similarity 82.6%; Pred. No. 3.8e+02; 19; Conservative 0; Mismatches 4; Indels Sequence 24 BP; 5 A; 8 C; 6 G; 5 T; 0 U; 0 Other; Human GPCR, SNORF7, PCR primer BB1015. 951 CTGCCACCGCAGAAGGTGCTAC 973 Disclosure, Page 3; Opp, English. Bonini JA Bonini BP 07-MAY-2002; 2002US-00140210. 99US-00375926 99US-00253999 ADF78061 standard; DNA; 24 (first entry) Borowsky BE, Kyaw H, Borowsky BE, Kyaw H, SNORF7 receptor cDNA (BORO/) BOROWSKY B E. (KYAW/) KYAW H. WPI; 2003-801282/75. WPI; 2003-898594/82 Local Similarity BONINI J.A. US2003176685-A1 Homo sapiens 22-FEB-1999; 17-AUG-1999; 26-FEB-2004 18-SEP-2003. Query Match ADF78061; (BONI/) Best Loca Matches RESULT 162 ADF78061 à 

The invention relates to a recombinant nucleic acid comprising a sequence

Disclosure; SEQ ID NO 7; 25pp; English

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and hybridising under high stringency conditions to a sequence encoding a nad hybridising under high stringency conditions to a sequence encoding a chuman or rat SNORF7 teceptor and having a sequence of the human or rat SNORF7 uncleic acid contained in plasmid pCR2.1-hSNORF7-p (ATCC Accession No. 203778) or plasmid pEXJ.T7-rSNORF7-f (ATCC Accession No. 203777); respectively. The recombinant nucleic acid is useful for studying the effects of neuroregulators for developing agonists and antagonists for cell surface receptors. SNORF7 also serves as a tool for developing drugs for treating inflammation (e.g. arthritis), autoimmune disease (e.g. AIDS), transplant rejection, infection (e.g. septicaemia), psychosis, cellschip disorders (e.g. Parkinson's disease, Alzheimer's disease, ceptersion), respiratory disorders (e.g. sethama), cancers, and many coher classes of disorders detailed in the specification. The present sequence is a PCR primer used to isolate cDNA encoding human SNORF7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNPB; genotyping; agammaglobulinaemia; diabetee insipidus; cancer; Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia; polycystic kidney disease; osteogenesis imperfects; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide primer extension (SNPE) primers, and the sequences of regions flanking sites of single nucleotide polymorphisms SNPs. The present invention includes kits for determining the presence or absence of a SNP, using the oligonucleotides of the invention. The PCR primers are used to amplify a SNP flanking sequence, the SNPE primer is used as a genotyping primer. The oligonucleotides are useful for genotyping a nucleic acid sample by
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Pred. No. 3.8e+02;
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Best Local Similarity 82.6%;
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AAH39887 standard; DNA; 25
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performing a single-nucleotide primer extension reaction. The cligonucleotides are useful for determining the presence, absence or identify of a SNP and for genotyping nucleic acid samples, for e.g. to assess by association analysis the genotype of an individual or group of individuals, having a pathological phenotypic trait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g. agammaglobulinaemia, diabetes insipidus. Lesch-Nyhan syndrome, muscular dystrophy, familial hypercholesterolaemia, polycystic kidney disease, cateogenesis imperfecta and acute intermittent porphyria. Phenotypic traits also include symptoms of or susceptibility to multifactorial disease of which a component is or may be genetic such as autoimmune diseases, including, rheumatoid arthritis, multiple sclerosis, including, rheumatoid arthritis, multiple sclerosis, including the prevent system diseases and infection by pathogenic microorganism. The method is also useful in forensic investigations and patemnter axtension (SNPE) primer specific for a human SNP containing DNA
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30-JAN-2001; 2001WO-US000661.
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000666.
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27-SEP-2000;
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The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 cacids cacids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 nucleic acids for the recombinant engineering of hGDMLP-1 provide initial substrates for the recombinant engineering of hGDMLP-1 captrovements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 collaboration, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The disorder associated with the expression of hGDMLP-1, in particular heart can disorder associated with the expression of hGDMLP-1, in particular heart consenting and skeletal manscle disorders. HGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patient did not form part of the printed argument in the particular particular hard and particular hard in the particular particular hard present invention. N.B. The sequence data for this patient did not form part of the printed particular hard in allocation of the present invention.
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New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser descrption ionization, comprises human myosin-like protein hGDMLP-1.
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2000US-0236359P.
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Matches 19; Conservative
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The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 mucleic acids in samples, as amplification substrates, to hGDMLP-1 mucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for capture proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1. Proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser description ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The polymucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and shelter muscle disorders. hGDMLP-1 is localised to chromosome 22.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis sypressed Parched like protein; testis; adernal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.0%; Score 16.6; DB 1; Length 25; 82.6%; Pred. No. 3.9e+02; tive 0; Mismatches 4; Indels
                                                                                                                                                      Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 25 BP; 2 A; 11 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human HTPL scanning oligonucleotide SEQ ID 3579.
                                                                                                                                                      Rank DR,
                                                                                                                                                                                                                                                                                                                                   Disclosure; SEQ ID NO 15297; 214pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             557 TCAGCCGCCGCCTCCGTCGTG 579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
                  30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
05-FEB-2001; 2001US-0266860P.
2001WO-US000668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-JAN-2002; 2002EP-00001167.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABV82333 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19; Conservative
                                                                                                                                                    Gu Y, Ji Y, Penn SG,
                                                                                                          (AEOM-) AEOMICA INC.
                                                                                                                                                                                               WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EP1229046-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        37-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABV82333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            166
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Matches
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ABV82333/c
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6

0; Gaps

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The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two oisoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL control structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is controlled in mapped to human chromosome 10pl2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of therapy and manufacture of a medicament for treatment or prevention of therapy and manufacture of a medicament for treatment or prevention of therapy and manufacture of a medicament for treatment or prevention of therapy and manufacture of a medicament for treatment or prevention of foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic agents for clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention
                                                                                                                                                                                                                                                                                                                                               Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Parched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 25 BP; 8 A; 10 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human HTPL scanning oligonucleotide SEQ ID 3584.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               219 CCTGGATGAGAGTGGTGGTG 241
                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; Page 533; 718pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ccaegarerraerearegreere
                                  30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
23-MAY-2001; 2001US-00864761.
09-OCT-2001; 2001US-0327898P.
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                  2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABV82338 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 82.6
nes 19; Conservative
                                                                                                                                                                                                                                                                                                        WPI; 2002-676582/73.
                                                                                                                                                                                                                   (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
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                                                                                                                                                                                                                                                              Zhan J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loca
Matches
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EP1229046-A2

07-AUG-2002

10017621-381.rng

01-AUG-2002.

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Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
                                                                                                                                                                                    Example 2; Page 533; 718pp; English
                                30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
33-JAN-2001; 2001WC-US000669.
33-JAN-2001; 2001WS-00864761.
       28-JAN-2002; 2002EP-00001167
                        30-JAN-2001; 2001WO-US000663
                                                                                                                                    WPI; 2002-676582/73.
                                                                                                   (AEOM-) AEOMICA INC
                                                                                                                    Zhan J;
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The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL stars an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is mapped to human chromosome 10p12.1. HTPL and in the HTPL gene was mapped to human chromosome 10p12.1. HTPL and in HTPL, and in cusclud for diagnosing a disorder caused by mutation in HTPL, and in such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and the HTPL. Such disorders include disorders of testis, or adrenal, adult and coetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an entire tribit. ö Gaps ; Query Match 1.0%; Score 16.6; DB 1; Length 25; Best Local Similarity 82.6%; Pred. No. 3.9e+02; Matches 19; Conservative 0; Mismatches 4; Indels Sequence 25 BP; 7 A; 10 C; 2 G; 6 T; 0 U; 0 Other; example from the invention

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216 AGGCCTGGATGAGAGTGGTG 238 23 AGGCCAGGATGTTAGTGATGGTG 1 q

PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss. Human PAPP-Ea associated 25-mer SEQ ID 1391. BP ABS75865 standard; DNA; 25 (first entry) 27-DEC-2002 ABS75865; 

US2002102252-A1 Homo sapiens

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This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, harper-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                     New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.0%; Score 16.6; DB 1; Length 25; 82.6%; Pred. No. 3.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 25 BP; 10 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1005 CAACGAGGGGGGGGGCTCAAGC 1027
                                                                                                                                                                                                                                                                                                                    Example 2; Page 258; 353pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3 cagcaadadadadadacrcaadc 25
                                   06-APR-2001; 2001US-00827998.
                                                                           26-MAY-2000; 2000US-0207456P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 82.6
Matches 19; Conservative
                                                                                                                                                                                                                 WPI; 2002-697817/75.
                                                                                                                 (GUYY/) GU Y.
(SHAN/) SHANNON M
                                                                                                                                                                            Gu Y, Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 169
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PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss. Human PAPP-Ea associated 25-mer SEQ ID 1392. 06-APR-2001; 2001US-00827998 US2002102252-A1. Homo sapiens. 01-AUG-2002 THE STANDARD STANDARD

ABS75866 standard; DNA; 25

ABS75866

ABS75866;

27-DEC-2002 (first entry)

26-MAY-2000; 2000US-0207456P

WPI; 2002-697817/75

Shannon ME;

Gu Y,

(GUYY/) GU Y. (SHAN/) SHANNON M

associated plasma protein E, for preventing or aborting pregnancy New isolated nucleic acid encoding an isoform of human pregnancy

Example 2; Page 258; 353pp; English.

This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hPAPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence reperseents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention

Sequence 25 BP; 10 A; 4 C; 10 G; 1 T; 0 U; 0 Other;

1.0%; Score 16.6; DB 1; Length 25; 32.6%; Pred. No. 3.9e+02; Ve 0; Mismatches 4; Indels 1005 CAACGAGAGGGGAGAGCTCAAGC 1027 CAGCAAGAGAGAGAGGTCAAGC 24 82.6%; Local Similarity 82.6 les 19; Conservative Query Match Matches g

RESULT 170 

ABS75867 standard; DNA; 25 ABS75867;

BP

(first entry) 27-DEC-2002

Human PAPP-Ea associated 25-mer SEQ ID 1393.

PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.

sapiens Homo JS2002102252-A1.

01-AUG-2002.

06-APR-2001; 2001US-00827998.

26-MAY-2000; 2000US-0207456P.

GU Y. SHANNON M E. (dury/) SHAN/)

Gu Y, Shannon ME;

WPI; 2002-697817/75.

associated plasma protein E, for preventing or aborting pregnancy New isolated nucleic acid encoding an isoform of human pregnancy

Example 2; Page 258; 353pp; English.

one This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hPAPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or

; aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention Gaps EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; 0; 1.0%; Score 16.6; DB 1; Length 25; 82.6%; Pred. No. 3.9e+02; Live 0; Mismatches 4; Indels Human microarray DNA oligonucleotide SEQ ID NO 91054. Sequence 25 BP; 10 A; 4 C; 10 G; 1 T; 0 U; 0 Other; 1005 CAACGAGAGGGGAGAGCTCAAGC 1027 1 CAGCAAGAGGAGAGGTCAAGC 23 BP 16-MAR-2001; 2001US-0276759P. 15-MAR-2002; 2002US-00098263. ACI91063 standard; DNA; 25 (first entry) Conservative cross-species comparison. (AFFY-) AFFYMETRIX INC WPI; 2003-567953/53. Local Similarity Les 19; Conserv US2003104410-A1 Mittmann MP; 14-0CT-2003 05-JUN-2003 ACI91063; Query Match datches RESULT 171 ACI91063 88888888888 à g 

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Gaps

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New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.

Claim 1; SEQ ID NO 91054; 9pp; English

The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dot-probe is useful in in situ hybridisation, in Southern, or dot-probe in the array of missing and across probes is useful in in situ hybridisation. blot hybridisation to identify or detect the sequence or specific mutations of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening cDNA or genomic libraries or subclones nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at seqdata.uspto.goc/sequence.html

Sequence 25 BP; 6 A; 4 C; 8 G; 7 T; 0 U; 0 Other;

2222

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Gaps

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Length 25; 4; Indels

Score 16.6; DB 1; Pred. No. 3.9e+02; 0; Mismatches 4;

82.6%;

Query Match Best Local Similarity 82.63 Matches 19, Conservative

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0
for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the
                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human;
                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                    Score 16.6; DB 1; Length 25; Pred. No. 3.9e+02;
                                                                                                                                                                                                                                                                                                                  4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human microarray DNA oligonucleotide SEQ ID NO 47771.
                                                                                                                                                                                         Sequence 25 BP; 6 A; 4 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                  from USPTO at segdata.uspto.goc/sequence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 47771; 9pp; English.
                                                                                                                                                                                                                                                                                                                                                                               1469 TGGGGGAGCGGATCCACAACTT 1491
                                                                                                                                                                                                                                                                                                                                                                                                                      2 TGGTGGATCCGATCCAGAAGCTT 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-MAR-2001; 2001US-0276759P.
                                                                                                                                                                                                                                                                                    82.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACI47780 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-OCT-2003 (first entry)
                                                                                                                                                                                                                                                          Query Match 1.0
Best Local Similarity 82.6
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cross-species comparison.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (AFFY-) AFFYMETRIX INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-567953/53.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mittmann MP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 172
ACI 47780/C

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AC ACI 477
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The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one target sequence in the method of analysis comprises hybridising at least one or more mucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, comprises or gene expression levels, identifying biallelic markers or polymorphisms, confamily members of a gene and a cross-species comparison.

Confamily members of a gene and a cross-species comparison.

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to identify or detect the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human;
                                                                                                                                                                                                                                                                                                                                                                       Human microarray DNA oligonucleotide SEQ ID NO 51199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New array of nucleic acid probes, useful for
Southern, Northern or dot-blot hybridization
sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 51199; 9pp; English.
                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-MAR-2002; 2002US-00098263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-MAR-2001; 2001US-0276759P.
                                                                                   ACI51208 standard; DNA; 25
                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cross-species comparison.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-567953/53.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                              13-0CT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mittmann MP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUN-2003.
                                                                                                                                                                                 ACI51208;
RESULT 173
                                                 ACI51208/c
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The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in analysis of genetic variation or in hybridisation to a DNA library, in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one or more nucleic acid probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring pene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern Northern or docuptoes is useful in in situ hybridisation, in Southern, Northern or docuptions of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening obba or general lave been containing segments of but have been is cleared and previously sequenced. The sequence presented is one of the

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The present invention relates to nucleic acid sequences that are complementary to particular genes, and can be used as probes for a variety of analyses such as gene expression analysis. Each probe comprises 9 or more consecutive nucleotides from at least one of 14936 nucleotide sequences defined in the patent, or their perfect sense match, sense mismatch oligoniclectides. The probes may be used in an array comprising at least 10 distinct nucleic acid probes. The array is useful in monitoring gene expression nucleic acid probes. The array is useful in monitoring genetic to variations, and in hybridising tag-labelled compounds. The probes are useful for identifying family members of a gene. The probes are also useful in in situ hybridisations, in screening cDNA or genomic libraries (or derived subclones) for additional clones containing segments of DNA that have been previously isolated and sequenced, in Southern, northern, or dot-blot hybridisation of genomic DNA to identify or detect the sequence of any gene or detect specific mutations in any gene, and in mapping the 5' termini of mRNA molecules by primer extensions. The morention provides a large collection of nucleic acid sequences of the invention are also useful as PCR primers. The invention provides a large collection of nucleic acid sequences complementary to particular genes with a wide range of analytical uses. Complementary to particular genes with a wide range of analytical uses. The sequence data for this patent was obtained in electronic format
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New probe array useful e.g. for monitoring gene expression levels, for analyzing genetic variations, or for hybridizing tag-labeled compounds, comprises multiple nucleic acid probes.
                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gene expression analysis, array, hybridisation, genetic variation, tag-labelled compound, gene family, in situ hybridisation, library screening, Southern hybridisation, northern hybridisation, dot-blot hybridisation, gene sequence; mutation detection, target sequence; probe; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA target sequence #12033 useful in array for genetic analyses.
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0
                                                                                         1.0%; Score 16.6; DB 1; Length 25; 82.6%; Pred. No. 3.9e+02; ive 0; Mismatches 4; Indels
                                            Sequence 25 BP; 4 A; 8 C; 11 G; 2 T; 0 U; 0 Other;
from USPTO at segdata.uspto.goc/sequence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; SEQ ID NO 12033; 9pp; English
                                                                                                                                                                              555 CCTCAGCCGCCGCCTCCGTCGTG 577
                                                                                                                                                                                                                           24 ccccccacccccrrcercerc 2
                                                                                                                                                                                                                                                                                                                                         ACH62897 standard; DNA; 25 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-AUG-2001; 2001US-0311040P.
                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                    Query Match
Best Local Similarity 82.6
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-576608/54.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JS2003082596-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unidentified.
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                                                                                                                                                                                                                                                                                                                                                                                      ACH62897;
                                                                                                                                                                                                                                                                                          RESULT 174
ACH62897/c
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The invention relate to a method of diagnosing (M1) non-blood disease such as solid tumor by providing peripheral blood sample of human having non-blood disease, and comparing an expression profile of specific genes in the peripheral blood sample is differentially expressed in peripheral genes, where each of the genes is differentially expressed in peripheral blood mononuclear cells (PBMCs) of patients having the disease as blood mononuclear cells (PBMCs) of patients having the disease as compared to PBMCs of normal humans. The method is useful for diagnosing non-blood disease such as solid tumor. The solid tumor is chosen from renal cell carcinoma (RCC), prostate cancer and head/neck cancer. The peripheral blood sample comprises enriched PBMCs. The peripheral blood sample is a whole blood sample (claimed). (M1) is useful for identifying genes that are differentially expressed in peripheral blood samples isolated at different stages of progression, development or treatment of RCC and/or other solid tumors. This sequence corresponds to a probe to detect a gene that is differentially expressed and detected by the method of the invention.
                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ss; diagnosis; non-blood disease; solid tumor; gene expression;
peripheral blood mononuclear cell; renal cell carcinoma; prostate cancer;
head/neck cancer; differential expression; probe.
directly from the USPTO web site at seqdata.uspto.gov/psipsDIDEntry.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Diagnosing non-blood disease such as solid tumor, involves comparing differential expression profile of specific genes in peripheral blood sample of subject with reference expression profile of specific genes.
                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dorner A, Stover JA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Renal cell carcinoma differentially expressed gene probe #2090.
                                                                                                                                                                                                    Indels
                                                                                                                                       Length
                                                                Sequence 25 BP; 6 A; 5 C; 7 G; 7 T; 0 U; 0 Other
                                                                                                                         Query Match
1.0%; Score 16.6; DB 1;
Best Local Similarity 82.6%; Pred. No. 3.9e+02;
Matches 19; Conservative 0; Mismatches 4;
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                                                                                                                                                                                                                                                                    1136 ACTACTCCACTCAGATTGACATG 1158
                                                                                                                                                                                                                                                                                                               25 ACTACCACACTCAGTGTGACATG 3
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03-APR-2003; 2003US-0459782P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADP15685 standard; DNA; 25
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BURCZYNSKI M E.
TREPICCHIO W L.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2004048933-A2
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Sloni DK;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TWIN/)
(BURC/)
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Length 18;

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primers AAV60743-V60745 were used to PCR amplify codons 1-163 of the human cyclin-dependent kinase 4 (hCDK4). The amplified product was used to generate a fusion protein comprising part of the hCDK4 sequence linked to codons 154-302 of the yeast PHOBS gene. The fusion protein is used to screen for compounds that affect mammalian cell cycle regulatory is exceen for compounds that affect mammalian cell cycle regulatory is proteins. The method comprises administering a compound to a cell line, which contains a reporter gene linked to an Upstream Activation Sequence (UAS) and a promoter, where the UAS binds a transcription control factor (TCF) which is regulated through cyclin/cyclin-dependent kinase (CDK) phosphorylation. Also included in the construct is an effector gene product to permit normal cyclin/CDK regulation of the TCF. Expression of the reporter gene is then analysed in the cell line, CCF. Expression of the reporter gene is then analysed in the cell line, compround affects the normal regulation. The method can be used to identify inhibitors and activators of mammalian cell cycle regulatory proteins, especially inhibitors and activators of cyclin/CDK/CKI complexes, cyclin kinase inhibitors (CKIS), and cyclin/CDK/CKI complexes. The identified agents can be used for stimulating growth of cells (as in wound healing), or regulating cyclin cycles in cancer therapy)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Screening for agents that effect cell cycle regulatory proteins - using a cell line that expresses a reporter gene in response to regulation through phosphorylation by a cyclin/CDK system.
                                                                                                                                                                                                                                                                                                                                                                                                                    PCR primer; amplification, yeast, UAS; upstream activating sequence; transcription terminator; cell cycle; Upstream Activation Sequence; UAS; promoter; phosphorylation; cyclin, cyclin-dependent kinase; CDK; vector; cyclin, kinase inhibitor; CKI; growth; wound healing; cancer therapy; ss.
                                                                                             Gaps
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0
                                                     Length 25;
                                                                                           Indels
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               6 A; 6 C; 4 G; 9 T; 0 U; 0 Other;
                                                     DB 1;
                                                 Score 16.6; DB 1;
Pred. No. 3.9e+02;
0; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                Primer #2 for human CDK4 codons 1-163.
                                                                                                                                  607 CTGGAGACCTACATTAAGCTGGA 629
                                                                                                                                                              25 CTGTAGACTGACATTAAGCAGGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 4; Page 75; 93pp; English
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                                                       1.0%;
                                                                         82.6%;
                                                                                                                                                                                                                                                                 AAV60744 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                               Conservative
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                                                                       Local Similarity
                   BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-OCT-1996;
27-NOV-1996;
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                   Sequence 25
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                                                                                             19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                         AAV60744;
                                                         Query Match
                                                                                                                                                                                                                           RESULT 176
AAV60744/c
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                                                                                                                                                                                                                                                                            Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
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                            Gaps
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                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
Score 16.4; DB 1;
Pred. No. 3.2e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 51; 109pp; English.
                                                           1033 GACTITGGCCTGGCCCGA 1050
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18
                                                                                                                                                                                                                                                 cdk3 ribozyme binding site #47
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                                                                                      18 GACTTTGGCCTGGCCAGA 1
                                                                                                                                                             ВР
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Local Similarity 94.4%;
hes 17; Conservative
               94.48;
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                                                                                                                                                             AAA82762 standard; DNA; 19
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                                                                                                                                                                                                                       (first entry)
Query Match
Best Local Similarity 94.4
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       (IMMU-) IMMUSOL INC
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                                                                                                                                                                                                                                                                                                                                                                                                06-DEC-1999;
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                                                                                                                                                                                           AAA82762;
                                                                                                                                                                                                                                                                                                          Mammalia.
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                                                                                                                                   RESULT 177
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                                                                                                                                                 AAA82762
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STK 3 gene specific primer.

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recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMD; matrix metalloprotesinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                Treating proliferative skin or eye diseases and scarring, using ribozymes
                                                                                                                                                                                                                                                                                                                                                                                              that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Page 97; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1029 GGCTGACTTTGGCCTGGC 1046
                                                                                                                                                                                                                                            26-OCT-2000; 2000WO-US029500.
                                                                                                                                                                                                                                                                      99US-0161532P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17; Conservative
                                                                                                                                                                                                                                                                                                                          Robbins JM, Tritz R;
                                                                                                                                                                                                                                                                                               (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-300427/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                        WO200130362-A2
                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                      26-OCT-1999;
                                                                                                                                                                                                                 03-MAY-2001.
                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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dermatological, cytostatic, antiseborrheic, antidiabetto, antisickling, ophthalmological, cytostatic, antiseborrheic, antidiabetto, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytckine involved in inflammation, matrix metalloproteinase (MMP). cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1) (1) can have antipsoriatic, Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 U; 0 Other; exemplification of the present invention

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Gaps
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0.9%; Score 16.4; DB 1; Length 19;
14.4%; Pred. No. 3.3e+02;
ve 0; Mismatches 1; Indels
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0

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GGCTGACTTCGGCCTGGC
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AAZ18127 standard; DNA; 20 AAZ18127; RESULT 179 AAZ18127 RXXXXXX

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11-OCT-1999 (first entry)
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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell compises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (c) determining in the first cell and the second cell; (c) determining the origin of a cell, its proximity index using a specified formula. The methods can be used for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is can be used for determining the origin of a selected treatment on a test cell. They can also be used for effect of a selected treatment on a test cell. They can also be used for containing cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected of gene family. Sequences AAZI7803-Z18342 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, encoured and approximate genes, encouraged from a set of homeobox genes, kinase genes, encouraged and approximate genes. ·. Genetic proximity, gene expression, cell characterisation, homeobox gene, genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR, kinase gene, protein phosphatase; P450; steroid receptor, cadherin; Genetic proximity; gene expression; cell characterisation; homeobox gene; Identifying and characterizing cells by comparing the pattern of gene Gaps ö Query Match

0.9%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 3.5e+02;
Matches 17; Conservative 0; Mismatches 1; Indels Sequence 20 BP; 8 A; 9 C; 2 G; 1 T; 0 U; 0 Other superfamily genes or cadherin superfamily genes expression in a selected gene family. Claim 4; Page 44; 102pp; English. 972 ACACCGAGACCTCAAGCC 989 20 BP 98WO-IL000625. 97IL-00122793 98IL-00126627 STK 17 gene specific primer. 3 ACACCGAGACCTCAAACC AAZ18155 standard; DNA; 20 (first entry) WPI; 1999-419113/35. (GENE-) GENENA LTD P-PSDB; AAY14662 28-DEC-1998; 29-DEC-1997; Homo sapiens WO9934016-A2 16-OCT-1998; 08-JUL-1999. 11-OCT-1999 primer; ss Synthetic. AAZ18155; Vider B; RESULT 180 **AAZ**18155 엄 Š

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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in a selected gene family; and (c) calculating of expression of genes in a selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is an individual, e.g. a fetus. They can also be used for detecting a selected genetic defect in an individual, e.g. a fetus. They can also be used for ceffect of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptuase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected gene family. Sequences AA217803-Z18342 represent primers that can be used con the family can be selected from a set of homeobox genes, kinase genes, protein phosphatase genes, P450 enzyme genes, steroid receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genetic proximity; gene expression; cell characterisation; homeobox gene; genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR; kinase gene; protein phosphatase; P450; steroid receptor; cadherin; primer; ss.
genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR; kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying and characterizing cells by comparing the pattern of gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%; Score 16.4; DB 1; Length 20;
94.4%; Pred. No. 3.5e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 8 A; 9 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     superfamily genes or cadherin superfamily genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expression in a selected gene family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 4; Page 45; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            972 ACACCGAGACCTCAAGCC 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 ACACCGAGACCTCAAACC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ18141 standard; DNA; 20 BP.
                                                                                                                                                                                                                        98WO-IL000625.
                                                                                                                                                                                                                                                               97IL-00122793
                                                                                                                                                                                                                                                                               98IL-00126627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STK 10 gene specific primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94.48;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 94.4'
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-419113/35.
                                                                                                                                                                                                                                                                                                                      (GENE-) GENENA LTD
                                                                                                                                                                                                                                                                                                                                                                                                                      P-PSDB; AAY14690
                                                                                                          Homo sapiens
                                                                                                                                               WO9934016-A2
                                                                                                                                                                                                                          28-DEC-1998;
                                                                                                                                                                                                                                                               29-DEC-1997;
                                                                                                                                                                                                                                                                                  16-OCT-1998;
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                                                                                                                                                                                   08-JUL-1999
                                                 primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ18141;
                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                               Vider B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 181
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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell compities: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is cransformed. They can be used for determining the individual, e.g. a fetus. They can also be used for determining the ciffect of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected gene family. Sequences AA21/803-218342 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, protein phosphatase genes, P450 enzyme genes, steroid receptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; antisense; lung dysfunction; nasal airway dysfunction; antinflammatory steroid; ubiquinone; antinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                      Identifying and characterizing cells by comparing the pattern of gene expression in a selected gene family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 16.4; DB 1; Length 20;
Pred. No. 3.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; B A; 9 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         superfamily genes or cadherin superfamily genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; Page 44; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human oligonucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABZ93276 standard; DNA; 20 BP.
                                                                                                                                                                                            97IL-00122793.
98IL-00126627.
                                                                                                                                                         98WO-IL000625.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.9%;
Best Local Similarity 94.4%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    972 ACACCGAGACCTCAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACACCGAGACCTCAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                    WPI; 1999-419113/35
                                                                                                                                                                                                                                                          (GENE-) GENENA LTD
                                                                                                                                                                                                                                                                                                                                                         P-PSDB; AAY14676.
                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-0CT-2003
                                                                            WO9934016-A2
                                                                                                                                                         28-DEC-1998;
                                                                                                                                                                                              29-DEC-1997;
                                                                                                                                                                                                                16-OCT-1998;
                                                                                                                   08-JUL-1999
                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           m
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                                                                                                                                                                                                                                                                                               Vider B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 182
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Gaps

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Tue Nov

Katz E, Pabalan J, Aguilar D;

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The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation coodon, coding regaion, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallargic, antisthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an infiltalmmatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or undiscontant in a subject's tissue, or treating bronchoconstriction, increasing levels of upiquinone or undiscontant in a subject's tissue, or treating bronchoconstriction, and the subject's tissue, or treating bronchoconstriction, and the subject's tissue, or treating bronchoconstriction, and the subject is the subject in the second subject in the sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 6 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; SEQ ID NO 8518; 872pp; English
                                                                                                                                                                                                                                                                                                                               Li Y, Sandrasagra A, Ka
Tang L, Shahabuddin S;
                                                                                                                                                               23-APR-2002; 2002WO-US013135.
                                                                                                                                                                                                                      24-APR-2001; 2001US-0286137P.
                                                                                                                                                                                                                                                                          (EPIG-) EPIGENESIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-229219/22.
                                                    WO200285308-A2
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JUL-2004
                                                                                                           31-OCT-2002
                                                                                                                                                                                                                                                                                                                            Nyce JW, I
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABD29506;
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. 0 analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta adrentatic agonist; respiratory disease; pulmonary vasconometriction; respiratory diserses syndrome; allergic rhinits; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; Gaps Human, antisense, bronchoconstriction, allergy, hyposecretion, pain, respiratory tract inflammation, adenosine sensitivity, lung, cancer, surfactant depletion, antiallergic, antiinflammatory, antiasthmatic, .. 0 0.9%; Score 16.4; DB 1; Length 20; 14.4%; Pred. No. 3.5e+02; ve 0; Mismatches 1; Indels AA664176-derived oligonucleotide SEQ ID 8518. 1087 GIGGIGACACIGIGGIAC 1104 ABD29506 standard; DNA; 20 BP Query Match
Best Local Similarity 94.4%;
Matches 17; Conservative 20 Gregreacacrerecre (first entry)

comprising oligonucleotides, effective for alleviating barochoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligomoleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, with a disease or condition such as pulmonary vasoconstriction, fulfalmmation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it analgesic, hypotensive, immunosupressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, and/or surfactant hypoproduction are associated This invention describes a novel composition (a) a first active agent, oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent. Pabalan J, Aguilar D; Pharmaceutical composition for treating asthma, has antisense Sequence 20 BP; 6 A; 8 C; 4 G; 2 T; 0 U; 0 Other; pulmonary transplantation rejection; ss; primer. Katz E, Claim 15; SEQ ID NO 8518; 763pp; English. Li Y, Sandrasagra A, Ka Tang L, Shahabuddin S; 23-APR-2002; 2002WO-US013143. 24-APR-2001; 2001US-0286036P. (EPIG-) EPIGENESIS PHARM INC. WPI; 2003-093058/08. WO200285309-A2. Homo sapiens. 31-OCT-2002 Miller S, Ę, 

0.9%; Score 16.4; DB 1; Length 20; 44.4%; Pred. No. 3.5e+02; Indels 0; Mismatches 1087 GTGGTGACACTGTGGTAC 1104 20 drádrakacháráracha 3 94.48; Best Local Similarity 94.4 Matches 17; Conservative Query Match ð

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Gaps

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ADI28140 standard; DNA; 20 BP. ADI28140 ADI28140/c ID ADI281 XX AC ADI281 RESULT 184

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The invention relates to a compound comprising a sequence comprising 8-80 base pairs (bp) targeted to a nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL-3), that specifically hybridises with the nucleic acid encoding PRL-3), that specifically hybridises with the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is an antisense oligonucleotide (AO). Also included are a composition comprising the compound and a carrier or diluent, inhibiting the suspected of PRL-3 in cells or tissues, treating an animal having or suspected of having a disease or condition associated with PRL-3 and screening for an antisense composition for treating hyperproliferative disorder, particularly cancer ((e.g. colorectal cancer), diabetes, reduced glucose tolerance, insulin resistance and obesity. The present sequence is an antisense oligonucleotide targeting human PRL3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense oligonucleotide, comprising a sequence targeted to a nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL -3), useful for preparing a composition for treating hyperproliferative disorders, e.g., cancer.
                                                                                                                                                                                                                                                               /note= "Phosphorothioate backbone and all cytidines are -methyl cytidines"
                                                                               Human; antisense gene therapy; ss; PRL3; protein tyrosine phosphatase type 17M member 3; colorectal cancer; diabetes; glucose tolerance; insulin resistance; obesity; hyperproliferative disorder; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 16.4; DB 1; Length 20; 34.4%; Pred. No. 3.5e+02; ive 0; Mismatches 1; Indels
                                                 Antisense oligonucleotide targeting human PRL3 ISIS 217467.
                                                                                                                                                                                                                                                                                                                                                                                                        /mod_base= OTHBR
/note= "2'-methoxyethyl residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                     /mod_base= OTHER
/note= "2'-methoxyethyl residues"
16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; SEQ ID NO 47; 77pp; English.
                                                                                                                                                                                                 Location/Qualifiers
1. .20
/*tag= b
                                                                                                                                                                                                                                                    /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-JUN-2002; 2002US-00177554.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-JUN-2002; 2002US-00177554
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                 22-APR-2004 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                            /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-070585/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Zhang H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
17; Conserv
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                                                                                                                                                                                                                      nodified base
                                                                                                                                                                                                                                                                                                       modified base
                                                                                                                                                                                                                                                                                                                                                                          modified base
                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dobie KW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
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Matches
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The invention relates to a compound comprising a sequence comprising 8-80 base pairs (bp) targeted to a nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL-3), that specifically hybridises with the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is an antisense oligonucleotide (AO). Also included are a composition comprising the compound and a carrier or diluent, inhibiting the expression of PRL-3 in cells or tissues, treating an animal having or suspected of having a disease or condition associated with PRL-3 and screening for an antisense compound. The antisense oligonucleotide is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotide, comprising a sequence targeted to a nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL -3), useful for preparing a composition for treating hyperproliferative disorders, e.g., cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             useful for preparing a composition for treating hyperproliferative disorder, particularly cancer ((e.g. colorectal cancer), diabetes, reduced glucose tolerance, insulin resistance and obesity. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Farnesoid X receptor gene expression antisense inhibitory oligo #2062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                      Human; antisense gene therapy; ss; PRL3; protein tyrosine phosphatase type IVA member 3; colorectal cancer; protein tyrosine tolerance; insulin resistance; obesity; hyperproliferative disorder; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
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0.9%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 3.5e+02;
Matches 17; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequence is a Human PRL3 cDNA AO target region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 16; SEQ ID NO 183; 77pp; English
                                                                                                                                         Human PRL3 antisense target region #20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120 CGCCATGGATCGGATGAA 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                        20-JUN-2002; 2002US-00177554.
                                                                                                                                                                                                                                                                                                                                                                     20-JUN-2002; 2002US-00177554
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                                                                                                    (first entry)
                                 ADI28276 standard; cDNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-070585/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zhang H;
                                                                                                                                                                                                                                                                                                 US2003235911-A1
                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                      22-APR-2004
                                                                                                                                                                                                                                                                                                                                    25-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dobie KW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ~
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                                                                   ADI28276:
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RESULT 185
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                  ADI28276
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Conservative

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                                 neuroprotective; vasotropic; antisense; gene therapy;
Parnesoid X receptor; diabetes; immunological disorder;
Cardiovascular disorder; dyslipidemia; atherosclerosis;
high density lipoprotein; low density lipoprotein; hypercholesterolemia;
gallstones; hypertriglyceridemia; obesity; neurological disorder;
ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides useful for modulating expression of farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders, gallstones or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Farnesoid X receptor gene expression antisense inhibitory oligo #1880.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiarteriosclerotic; hepatotropic; litholytic; anorectic; neuroprotective; vasotropic; antisense; agene therapy; Farnesoid X receptor; diabetes; immunological disorder; cardiovascular disorder; dyslipidemia; atherosclerosis;
ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiarteriosclerotic; hepatotropic; litholytic; anorectic;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; SEQ ID NO 2062; 150pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1658 ACACCCCTCACAGGCAG 1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACACCCCTCACAGGTCAG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                 25-SEP-2003; 2003WO-US030353.
                                                                                                                                                                                                                                                                                                                                      25-SEP-2002; 2002US-0413588P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADO54507 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17; Conservative
                                                                                                                                                                                                                                                                                                                                                                             (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-347928/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                    WO2004030750-A1
                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-JUL-2004
                                                                                                                                                                                                                                                            15-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nvention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADO54507;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                   Kane CD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 187
ADO54507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loc
Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 composition is used for diagnostics, prophylaxis, or as research reagents or kits. This sequence corresponds to an antisense oligonucleotide of the
high density lipoprotein; low density lipoprotein; hypercholesterolemia; gallstones; hypertriglyceridemia; obesity; neurological disorder; ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 obesity,
In addition, the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiarteriosclerotic; hepatotropic; litholytic; anorectic; neuroprotective; vasotropic; antisense; gene therapy; Farnesoid X receptor; diabetes; immunological disorder; cardiovascular disorder; dyslipidemia; atherosclerosis; high density lipoprotein; low density lipoprotein; hypercholesterolemia; gallstones; hypertiglyceridemia; obesity; neurological disorder; ischemia; repertusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonuclectides useful for modulating expression of Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Farnesoid X receptor gene expression antisense inhibitory oligo #1983.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           dyslipidemia and its symptoms, atherosclerosis, low HDL (high density lipoprotein) or hypercholesterolemia, gallstones, hypertriglyceridemia, obesity, hypercholesterolemia, or ischemia/reperfusion injury. In addition, theurological disorders, or ischemia/reperfusion injury. In addition, the content of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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94.4%; Pred. No. 3.5e+02;
lve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; SEQ ID NO 1880; 150pp; English.
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                                                                                                                                                                                                                                                                                                                                                25-SEP-2003; 2003WO-US030353
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACACCCCTCACAGGTCAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gallstones or obesity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-347928/32.
                                                                                                                                                                                                           WO2004030750-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kane CD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loca
Matches
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Homo sapiens

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Claim 4; SEQ ID NO 1983; 150pp; English.
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                                                                                                                                                                                                                                                                              2 ACACCCCTCACAGGTCAG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                      27-JUL-2000; 2000US-0221074P.
                                                                                                                                                                                                                                                                                                                                                                                                                          27-JUL-2001; 2001WO-US023834
                              25-SEP-2003; 2003WO-US030353
                                          25-SEP-2002; 2002US-0413588P
                                                                                                                                                                                                                                                   1 Similarity 94.48;
17; Conservative
                                                                                                                                                                                                                                                                                                                 AAD30434 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                          (first entry)
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                                                     (PHAA ) PHARMACIA CORP
                                                                                                         e.g. diabetes, immunol
gallstones or obesity.
                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 17; Conservat
                                                                               WPI; 2004-347928/32.
     WO2004030750-A1
                                                                                                                                                                                                                                                                                                                                                                                                 WO200210452-A2
                                                                                                                                                                                                                                                                                                                                          21-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                  15-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                              07-FEB-2002
                                                                                                                                                                                                                       invention.
                                                                                                                                                                                                                                                                                                                             AAD30434;
                                                                   Kane CD;
                                                                                                                                                                                                                                                                                                     RESULT 189
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The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library,
                                                                                                                                                                                                                                                                The invention relates to a method for assessing the risk of prostate cancer in a human subject. The method involves determining the length of the contiguous CAG or CAA repeats in both AIBI (Amplified In Breast cancer 1) gene alleles or contiguous CAG, CAA or GGN repeats in the androgen receptor gene of the subject. The method is useful for assessing as subject's risk for acquiring or developing prostate cancer. The present sequence is a PCR primer used to amplify human androgen receptor (AR) gene exon 1 and is used in the molecular analysis and assessment of the
                                                                                              Assessing the risk of acquiring or developing prostate cancer in a human subject, comprises determining the length of the contiguous CAG, CAA and/or {\tt GGN} repeats in the AIB1 gene and/or androgen receptor gene of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; cross-species comparison.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 16.4; DB 1; Length 24; Pred. No. 4.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human microarray DNA oligonucleotide SEQ ID NO 40306.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Seguence 24 BP; 3 A; 13 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 40306; 9pp; English.
                                                                                                                                                                                                                     Claim 39; Page 42; 86pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                554 CCCTCAGCCGCCGCCTCC 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 cccrcadcodcocrrcc 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-MAR-2002; 2002US-00098263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-MAR-2001; 2001US-0276759P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ch 0.9%;
1 Similarity 94.4%;
17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACI40315 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGN repeat of AR gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-567953/53.
                                                WPI; 2002-206195/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003104410-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mittmann MP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACI40315;
  Chang C;
                                                                                                                                                                          subject
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACI40315/
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for inhibiting the expression of FXR (Farnesoid X receptor) in cells or tissues, or for treating diseases or conditions associated with FXR, such as diabetes, immunological disorders, cardiovascular disorders, e.g. dyslipidemia and its symptoms, atherosclerosis, low HDL (high density lipoprotein), elevated LDL (low density lipoprotein) or hypercholesterolemia, gallstones, hyperthiglyceridemia, obesity, neurological disorders, or ischemia/reperfusion injury. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or kits. This sequence corresponds to an antisense oligonucleotide of the
                                                                                                                                                                                                                                                                                                                                                                                             Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides useful for modulating expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; AIB1; amplified in breast cancer 1; androgen receptor; AR; prostate cancer; exon 1; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human androgen receptor (AR) gene exon 1 amplifying primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 16.4; DB 1; Length 20;
94.4%; Pred. No. 3.5e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
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Gaps

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in analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises by the nucleic acid probes are expectation. The nucleic acid probes and detecting the hybridisation. The nucleic acid probes and detecting the hybridisation. The nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dottored probes is useful in in situ hybridisation, in Southern, Northern or dottored mutations of any gene, in mapping the 5' termin of mRNA melecules by primer extensions or in screening cDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the conclusion of any patent can also be obtained in electronic format directly form the microarray. Note: The sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USPTO at segdata.uspto.goc/sequence.html
```

0.9%; Score 16.4; DB 1; Length 25; 44.4%; Pred. No. 4.3e+02; ve 0; Mismatches 1; Indels Sequence 25 BP; 2 A; 8 C; 7 G; 8 T; 0 U; 0 Other; 94.48; 17; Conservative Local Similarity Query Match Matches

977 GAGACCTCAAGCCCCAGA 994 GAGACCTCTAGCCCCAGA 1

AAS11083 standard; DNA; 21 AAS11083

BP

AAS11083;

Bacterial 16s RNA antisense oligomer #49. (first entry) 24-OCT-2001

Antisense; bacterial 16s ribosomal RNA; rRNA; bacterial infection; human; food grain supplement; livestock; poultry; therapeutic; ss.

Streptococcus pneumoniae

WO200142457-A2

14-JUN-2001.

29-NOV-2000; 2000WO-US042391.

99US-0168150P. 29-NOV-1999;

(AVIB-) AVI BIOPHARMA INC

versen PL;

WPI; 2001-457295/49

Antibacterial compound, useful for treating bacterial infections and as livestock and poultry food supplement, comprises antisense oligonucleotides complementary to bacterial 16S and 23S rRNA.

Disclosure; Page 28; 62pp; English

ribosomal RNA (TRNA) antisense oligomers. These sequences are antibacterial compounds comprising substantially uncharged antisense oligomers containing 8-40 nucleotide subunits, including a targeting nucleic acid sequence at least 10 nucleotides in length which is complementary to a bacterial 16S or 23S TRNA nucleic acid sequence. The antisense oligomers are used for treating a bacterial infection in a human or a mammalian animal produced by Escherichia coli, Salmonella AAS11035-AAS11157 represent the coding sequences of bacterial 16S 

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typhimurium, Pseudomonas aeruginosa, Vibrio cholera, Neisseria gonorrhoea, Helicobacter pylori, Bartonella henselae, Haemophilus influenza, Shigella dysenterae, Staphylococcus aureus, Mycobacterium tuberculosis, Streptococcus pneumoniae, Treponema palladium and Chiamydia trachomatis. The antibacterial compound may be used as a food grain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3
                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                   Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #26.
                                                                                                                             .
                                                                                                   0.9%; Score 16.2; DB 1; Length 21; 85.7%; Pred. No. 4e+02;
                                                                                                                                                                                                                                                                                                                           Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
                                                       supplement in livestock and poultry food composition
                                                                               Sequence 21 BP; 6 A; 7 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                               Pred. No. 4e+02;
0; Mismatches
                                                                                                                                                  1439 ATGCCATGAAACATCCATTCT 1459
                                                                                                                                                                  1 ATGTCATGCAACATCCACTCT 21
                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Zhong W, Hong Z, Ferrari E;
                                                                                                                                                                                                                                                                                                                                                                                                                    06-APR-2001; 2001US-00828034
                                                                                                                                                                                                                                                                                                                                                                                                                                            07-APR-2000; 2000US-0195852P.
                                                                                                                                                                                                                                ABK99296 standard; RNA; 21
                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-582330/62.
                                                                                                              Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (FERR/) FERRARI E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ZHON/) ZHONG W.
                                                                                                                                                                                                                                                                                                                                                                       US2002064771-AL
                                                                                                                                                                                                                                                                             21-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                              30-MAY-2002.
                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                       ABK99296;
                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (HONG/)
                                                                                                                                                                                                          RESULT 192
                                                                                                                                                                                                                      ABK99296,
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Gaps

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The invention relates to a replicase complex comprising a hepatitis C vortus (HCV) NSSB replicase protein, a linear nucleic acid template, and a complementary nucleic acid primer which is annealed to the 3' terminus of the template, where the template is at least three nucleotides and the primer is two or three nucleotides, and the template and primer do not form a stable duplex in solution in the absence of the HCV NSSB protein. The complex is useful for detecting HCV replicase activity and permits establishment of sensitive RNA-dependent RNA polymerase assays to screen and evaluate antiviral inhibitors and to improve the specificity and efficacy of the inhibitors. The complex is also useful in the development of a reliable system for determining kinetic and thermodynamic constants of HCV NSSB-catalysed nucleotide incorporation and investigation of Specifically, the short RNA template and primer pairs are useful in screening assays which are used for determining kinetic, thermodynamic and mechanistic properties of NSSB replication and ultimately in the development of inhibitors of NSSB. Newly identified inhibitors of replicase activity may be used for developing anti-HCV pharmaceuticals.

leotide-long template to which a 2 nucleotide-long primer is annealed template and primer which do not form a stable duplex in the absence

nucleotide-long and template and

of HCV NS5B

Example; Page 6; 17pp; English.

1140 CICCACTCAGATTGACATGTG 1160

1 CTCCACTCAGTATGACATCTG 21

ABT34114 standard; DNA; 21

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                                                                                                                                                                      ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
                                                                                                                                                                      Gaps
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                                                                                                                    Score 16.2; DB 1; Length 21; Pred. No. 4e+02;
                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human chromosome 1p36-35 PCR primer SEQ ID NO:1465.
                                                                      0 G; 0 T; 0 U; 0 Other;
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                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                    230 GIGGIGGIGGIGGCGCAGIG 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 4; Page 33; 528pp; Japanese.
                                                                                                                                                                                                                                                     GIGGIGGIGGIGGIGGIG 1
                                                                                                                                                                                                                                                                                                                                                                                             ABL44421 standard; DNA; 21 BP
                                                                                                                    0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-MAR-2000; 2000JP-00066716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-MAR-2001; 2001JP-00068285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RIKA ) RIKAGAKU KENKYUSHO. (GENO-) GENOTEX YG.
                                                                      Sequence 21 BP; 7 A; 14 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                      18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Arraying genome clones.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-144136/19
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Best Local Similarity
Matches 18; Conserv
                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JP2001321190-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
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                           templates
                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human;
                                                                                                                                                                                                                                                                                                                                     RESULT 193
ABL44421
XX
AC ABL4444
XX
DY 11-APR
XX
DY Human;
XX
MW Human;
XX
COS Home S
DN HOW S
DN HOW
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention comprises a method for inferring a genetic pigmentation trait of a human. The method involves identifying a single nucleotide polymorphism (SMP) in a pigmentation gene - where the pigmentation gene is not melanocortin-1 receptor (MCIR) and agouti signaling protein (ASIP). The method of the invention is useful for inferring a genetic pigmentation trait of a human, especially for inferring the race of a human subject. The method is useful for inferring a genetic pigmentation trait such as hair shade or colour, or eye shade or colour of a human subject. The method may be used as a forensic tool for obtaining information relating to physical characteristics of a potential crime.
                                                                                                                                                                               Human; single nucleotide polymorphism; SNP; ss; melanocortin-1 receptor; genetic pigmentation trait; MCIR; agouti signaling protein; ASIP; race; hair colour; eye colour; forensic tool; PCR; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         victim or a perpetrator of a crime from a nucleic acid sample present at a crime scene. The present PCR primer is used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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0
                                                                                                                  Human pigmentation trait-related PCR primer - SEQ ID No 213.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.9%; Score 16.2; DB 1; Length 21; larity 85.7%; Pred. No. 4e+02; Conservative 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 17; Page 248; 396pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         863 TGAAGCAGTACCTGGATGACT 883
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , 2001US-0293560P.
2001US-0300187P.
2001US-0310781P.
2001US-0333662P.
2001US-0344418P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (DNAP-) DNAPRINT GENOMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-MAY-2002; 2002WO-US016789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-JAN-2002; 2002US-0346303P
                                                         (first entry)
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les 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                      WO200297047-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JUN-2001;
07-AUG-2001;
17-SEP-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention
                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-OCT-2001;
15-NOV-2001;
                                                            29-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Frudakis T;
ABT34114;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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Matches
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Gaps ö

l Similarity 85.7%; 18; Conservative

probe; ss; chemical modification; methylation; array; CpG island; tumour suppressor; p16; human; H69; H1618. Human DNA probe used to immobilise CpG methylated DNA SegID 272.

27-JUN-2002; 2002US-00184085.

US2003152950-A1

14-AUG-2003

27-JUN-2001; 2001US-0301370P.

(GARN/) GARNER H R. (MINN/) MINNA J D. (LUEB/) LUEBKE K J. (BALO/) BALOG R P.

(MINN/) (LUEB/)

Shaw P;

Lee FY,

1 AGTCGCAGAACCTGCTCATTA 21

BP.

ADJ13145 standard; DNA; 21

RESULT 196

ADJ13145

(first entry)

20-MAY-2004

ADJ13145;

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predictor set; protein tyrosine kinase activity modulator;
protein tyrosine kinase pathway; protein tyrosine kinase; cytostatic;
gene therapy; drug sensitivity; genetic profile; cancer; human;
PCR primer; ss.
                                                                                                                                                                                                                                                                                                 New polynucleotides and polypeptides for predicting the activity of compounds that interact with protein tyrosine kinases and/or protein
                                                                        Human src biomarker reverse PCR primer SEQ ID NO:756.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                    Example 2; SEQ ID NO 756; 139pp; English.
                                                                                                                                                                                                                                           (BRIM ) BRISTOL-MYERS SQUIBB CO
                  ADD14567 standard; DNA; 21 BP.
                                                                                                                                                                                                      17-JAN-2003; 2003WO-US001981.
                                                                                                                                                                                                                         18-JAN-2002; 2002US-0350061P.
                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 85.7°
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                   tyrosine kinase pathways.
                                                                                                                                                                                                                                                             Huang F, Fairchild CR,
                                                                                                                                                                                                                                                                               WPI; 2003-636735/60.
                                                                                                                                                                  WO2003062395-A2
                                                                                                                                                 Homo sapiens.
                                                      01-JAN-2004
                                                                                                                                                                                    31-JUL-2003
                                                                                                                                       Synthetic
                                    ADD14567;
RESULT 195
          ADD14567
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Balog RP;

Luebke KJ,

Minna JD,

Garner HR,

WPI; 2003-874843/81.

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The present invention describes a predictor set comprising a plurality of polynucleotides or polypeptides whose expression pattern is predictive of the response of cells to treatment with a compound that modulates protein tyrosine kinase activity or members of the protein tyrosine kinase activity or members of the protein tyrosine kinase activity or cells, comprising obtaining a sample of cells, concrelating the activity of cells, comprising obtaining a sample of cells, correlating the activity of cells, comprising obtaining a sample of cells, correlating the expression of the markers to the compound's ability to correlate the activity of the cells, (2) a plurality of cell lines for identifying polynucleotides and polypeptides with compound sensitivity or resistance of cells associated with a disease state, compound sensitivity or resistance of cells correlated with a disease state, comprising subjecting the plurality of associated with a disease state, comprising subjecting the plurality of associated with a disease state, comprising subjecting the cells associated with a disease state, comprising the expression pattern of a microarray of polymucleotides or polypeptides that predict the sensitivity or resistance of cells associated with a disease state by using the expression pattern of the microarray. The polymucleotides and cells associated with a disease state by using the expression pattern of the microarray. The polymucleotides and collates and collate as and can be used in gene therapy. The polymucleotides and polypeptides are useful in predicting the expression pattern of the microarray. However, we need in gene therapy.

The polymucleotides and polypeptides are useful in predicting the expression pattern of the microarray. However, we need in gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                procein tyrosine kinase pathways. These may be used in determining drug sensitivity in patients to allow the development of individualized genetic profiles which aid in treating diseases and disorders (e.g. cancer) based on patient response at a molecular level. The present sequence is used in the exemplification of the present invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CPG island. In
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Analysis of chemical modification of DNA involves obtaining sample of DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pl6 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  different base sequences, and determining sequence of resulting DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                be analyzed, treating DNA with chemical reagents that result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.9%; Score 16.2; DB 1; Length 21; llarity 85.7%; Pred. No. 4e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21 BP; 4 A; 12 C; 0 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; SEQ ID NO 272; 210pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        221 TGGATGAGAGTGGTGGTG 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 regarcacacrecacacere 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAI66678 standard; DNA; 22 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
es 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAI66678/c
ID AAI66
XX
AC AAI66
8
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; 0

Gaps

.. 0

0.9%; Score 16.2; DB 1; Length 21; 85.7%; Pred. No. 4e+02; 1ive 0; Mismatches 3; Indels

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Determining a risk factor for arteriosclerosis comprises detecting mutations in genes for cholesterol ester transfer protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 22 BP; 5 A; 12 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                               high density lipoprotein; human; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        lung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PDE4A-MTA oligonucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 20; 58pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                232 GGTGGTGGTGGCGCAGTGAC 252
                                                                                    Human CETP DNA related PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22 geregregaregeaacreac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABZ99041 standard; DNA; 22 BP
                                                                                                                                                                                                                                                                                                                                                                                                                        23-MAR-2001; 2001WO-JP002327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-MAR-2000; 2000JP-00084264
                         07-JAN-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 85.7
Matches 18; Conservative
                                                                                                                                                   arteriosclerosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-611516/70.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ito M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (BMLB-) BML INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200285308-A2
                                                                                                                                                                                                                                                                                                   WO200171032-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-0CT-2003
                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matsuzawa Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-OCT-2002
                                                                                                                                                                                                                                                                                                                                                               27-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nagano M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABZ99041;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 198
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABZ99041/V
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AC ABZ9
XX
AC ABZ9
XX
DT 17-0
XX
KW Huma
XX
KW anti
KW A
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Sagehashi Y, Hattori H,

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The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' end 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a immunosuppressive, and cytostatic activity. The composition may have a composition and sense gene therapy. The composition may have a composition and sense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of antiinflammatory steroid in a subject, for reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung inflammation, lung allergies, or a respiratory disease or condition, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                             Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                     Aguilar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 16.2; DB 1; Length 22;
Pred. No. 4.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human PDE4A-MTA-derived oligonucleotide SEQ ID 14283.
                                                                                                                                                     Pabalan J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; SEQ ID NO 14283; 872pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                     Katz E,
                                                                                                                                                  Li Y, Sandrasagra A, K
Tang L, Shahabuddin S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               535 AGCCCCATCTTTGACAAGCCC 555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22 AGCCCCATGTGTGACAAGCAC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
23-APR-2002; 2002WO-US013135.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.9%;
                                                  24-APR-2001; 2001US-0286137P
                                                                                                     (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABD32072 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.9
Best Local Similarity 85.7
Matches 18; Conservative
                                                                                                                                                                                                                                WPI; 2003-229219/22.
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                                                                                                                                                  Nyce JW, I
Miller S,
                                                                                                                                                                                                                                                                                                                                                                ubiquinone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABD32072;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, antisense; lung dysfunction, nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to detecting the risk factor for arteriosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    in a subject that involves detecting mutations in the gene for cholesterol ester transfer protein (CETP) related to the degree of risk of arteriosclerosis. The mutant proteins alter the level of HDL in the blood. The high frequency mutations can be detected for prevention and treatment of arteriosclerosis. Sequences AaI66655-91 represent PCR primers related to the human CETP DNA, used during the course of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Yamashita S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                cholesterol ester transfer protein; HDL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 16.2; DB 1; Length 22; 85.7%; Pred. No. 4.1e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Egashira T,
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airway inflammation, allergy, asthma, impeded respiration; cystic fibrosis, acute respiratory distress syndrome, pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;

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This invention describes a novel composition (a) a first active agent, comprising oligonuclectides, effective for alleviating bronchoconstraction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, configuration or hyposecretion, when administered to a marmal. The oligonuclectides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonuclectides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostacic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The composition and comparison of the larget mRNA or to increase the degradation and continuation and comparison 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    associated
                                                                                                                                                                                                                                                                                                                                                                                                   Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted to nucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                       Pabalan J, Aguilar D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inflammation, allergies and/or surfactant hypoproduction are ass
with a disease or condition such as pulmonary vasoconstriction,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
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15.7%; Pred. No. 4.1e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 15; SEQ ID NO 14283; 763pp; English.
                                                                                                                                                                                                                                                       Katz E,
                                                                                                                                                                                                                                             Li Y, Sandrasagra A, Ka
Tang L, Shahabuddin S;
                                                             23-APR-2002; 2002WO-US013143.
                                                                                                                           24-APR-2001; 2001US-0286036P.
                                                                                                                                                                                      (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85.7%;
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Best Local Similarity 85.77
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        bronchodilating agent.
                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-093058/08.
31-OCT-2002
                                                                                                                                                                                                                                                    Nyce JW,
Miller S,
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Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codons and introns of respiratory disease-relevant genes e.g., CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory

Claim 2; SEQ ID NO 2156; 85pp; English

disease e.g., asthma.

Miller S;

Aguilar D,

Nyce JW, Tang L, Sandrasagra A, Shahabuddin S, Lu H, Cong H;

WPI; 2004-203534/19.

25-JUL-2003; 2003WO-US023509 29-JUL-2002; 2002US-0399076P (EPIG-) EPIGENESIS PHARM INC

WO2004011613-A2 Homo sapiens

05-FEB-2004.

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interleukin; IL-4 receptor; IL-5 receptor; lung disease;
airway inflammation; allergy; asthma; impeded respiration;
cystic fibrosis; acute respiratory distress syndrome;
pulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 16.2; DB 1; Length 22; 85.7%; Pred. No. 4.1e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                          Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide associated to PDE4A #207.
                                                                                                                                                                                                                                                                                                                                                                                     535 AGCCCCATCTTGACAAGCCC 555
                                                                                                                                                                                                                                                                                                                                                                                                   22 AGCCCCATGTGTGACAAGCAC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                       ADJ60924 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                      18; Conservative
                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-MAY-2004
                                                                                                                                                                                                                                                                                                                             invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADJ60924;
                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 201
                                                                                                                                                                                                                                                                                                                                                                       Matches
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535 AGCCCCATCTTTGACAAGCCC 555 AGCCCCATGTGTGACAAGCAC 2 interleukin; IL-4 receptor; IL-5 receptor; lung disease;

Oligonucleotide associated to PDE4D #2.

(first entry)

06-MAY-2004

MX BX BX BX BX BX B

BP.

ADJ61300 standard; DNA; 22

ADJ61300/

.. 0

useful for production of a medicament for the prevention and/or treatment of a respiratory or lung disease. The respiratory or lung disease is chosen from airway inflammation, allergy(ies), asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases (CDD), allergic rhinitis (AR), acute respiratory distress syndrome (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway obstruction. The present sequence represents an oligonucleotide of the

The present invention relates to an oligonucleotide anti-sense to e.g., initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-end of nucleic acid target comprising gene(s) chosen from e.g. interleukin (II)-4 receptor, II-5 receptor or salts of the oligonucleotide and optionally surfactant operatively linked to the oligonucleotide. The method is useful for preventing or treating a respiratory or lung disease, which involves administering to the airways of a subject an effective amount of an inhibitor. The oligonucleotide is

Tue Nov

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Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5; CCR1; CCR3; Ectaxin-1; RANTES; MCP4; CD23; ICAM, VCAM; tryptase a; tryptase b; PDE4 A; PDE4 B; PDE4 C; PDE4 B; DEE4 C; PDE4 B; DEE4 C; PDE5 B; DEE4 C; PDE5 B; DEE5 C; DE5 CEPTOR; disease; hyper-responsiveness; adenosine, adenosine A receptor; asthma; lung allergy; inflammation; inflammatory disease; already inflammation; allergy; impeded respiration; cystic fibrosis; CF; chronic obstructive pulmonary disease; COPD; allergic rhinitis; acute respiratory distress syndrome; pulmonary hypertension; lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   535 AGCCCCATCTTTGACAAGCCC 555
                                                                                                                                                               Nyce JW, Tang L, Sandrasagra A,
Shahabuddin S, Lu H, Cong H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22 AGCCCCATGTGTGACAAGCAC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADO46413 standard; DNA; 22 BP
                                                                               25-JUL-2003; 2003WO-US023509
                                                                                                        29-JUL-2002; 2002US-0399076P
                                                                                                                                     (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human oligonucleotide #1779.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18; Conservative
                                                                                                                                                                                                                                                                            disease e.g., asthma.
                                                                                                                                                                                                    WPI; 2004-203534/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                         WO2004011613-A2.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                   05-FEB-2004
                                                                                                                                                                                                                                                 nitiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AD046413;
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ADO46413/C
XX
AC ADO46
XX
XX
DT 15-U1
XX
KW HUMAI
XX
KW TUNP
KW CCR1
KW CCR1
KW ASTH
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Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codon, intron of respiratory disease-relevant gene e.g. CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 2; SEQ ID NO 1780; 174pp; English.
                                                                                    25-JUL-2003; 2003US-00627930.
                                                                                                                   23-APR-2002; 2002WO-US013135.
23-APR-2002; 2002WO-US013143.
                                                                                                                                                                        NYCE J W.
SANDRASAGRA A.
                                                                                                                                                                                                                                              MILLER S.
SHAHABUDDIN S.
                                                                                                                                                                                                                                                                                                                                                  Shahabuddin S, Lu H,
                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-293804/27.
                US2004049022-A1
                                                                                                                                                                                                                                                                                                 CONG H.
                                                   11-MAR-2004
                                                                                                                                                                                                                                                                                                                                    Nyce JW,
                                                                                                                                                                        (NYCE/)
(SAND/)
                                                                                                                                                                                                                                                                                                 CONG/)
                                                                                                                                                                                                                                                              SHAH/)
                                                                                                                                                                                                           TANG/)
                                                                                                                                                                                                                             AGUI/
ö
                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to an oligonucleotide anti-sense to e.g., initiation codon, coding region with 2-10 nucleotides of 5'-end and 3'-end of or comprising gene (s) chosen from e.g. interleukin (IL)-4 receptor, IL-5 receptor or salts of the oligonucleotide and optionally surfactant operatively linked to the oligonucleotide. The method is useful for preventing or treating a respiratory or lung disease, which involves administering to the airways of a subject an effective amount of an inhibitor. The oligonucleotide is useful for production of a medicament for the prevention and/or treatment of a respiratory or lung disease is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  chosen from airway inflammation, allergy(ies), asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases (COPD), allergic rinitis (AR), acute respiratory distress syndrome (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway obstruction. The present sequence represents an oligonucleotide of the
                                                                                                                                                                                                                                                                                               single or multiple target oligonucleotide anti-sense to e.g. ution codons and introns of respiratory disease-relevant genes e.g., RANTES, MCP4, useful for prophylaxis or treating respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                           Aguilar D, Miller S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seguence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                       Claim 2; SEQ ID NO 1780; 85pp; English.
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Aguilar D, Miller S;

Tang L,

Sandrasagra A, Tany

AGUILAR D.

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The invention relates to oligonucleotides anti-sense to an initiation codon, coding region, 5' or 3' intron-exon junction, intron or region with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid targin with 2-10 nucleotides of the 5'-end or 3'-end of a nucleic acid targin chosen from a gene encoding interleukin (II) -4 receptor, interleukin (II) -5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, CTAPAGES of a method of screening a candidate compound that binds to a more nucleic acid target(s) or expressed product(s). For the one or more nucleic acid target(s) or expressed product(s), for the oligonucleotides are useful for reducing or inhibiting expression of a conformation interleukin-5 receptor, CCR1, CCR3, Eotaxin-1, RANTES, MCP4, CD23, ICAM, CTAM, tryptase a, tryptase b, PDE4 A, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are useful for reducing a respiratory or lung disease. The cuspituatory or lung disease is associated with hyper-responsiveness to and/or increased levels of, adenosine and/or levels of adenosine A receptor(s), and/or asthma and/or lung allergies associated with conformation or an inflammatory disease. The respiratory or lung disease (CCC) inflammation, allergy, asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary disease (COPD), hypertension, lung inflammation, allergy asthma, impeded respiration, or hypertension, lung inflammation, bronchitis, airway obstruction or propertice of the production or produced the production or produced the production or produced the produced produced the produced of the produced or produced the produced produced the produced produced the produced produced by the produced produced produced produced by the produced produced produced by the produc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        535 AGCCCCATCTTGACAAGCCC 555
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Les 18; Conserv
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Matches
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ADO46690 standard; DNA; 22 BP

RESULT 203 ADO46690/c ADO46690

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Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5; CCR1; CCR3; Ectaxin-1; RANTES; MCP4; CD23; ICAM; UCAM; tryptase a; tryptase b; PDE4 B; PDE4 C; PDE4 D; respiratory disease; lung disease; hyper-responsiveness; adenosine; adenosine A receptor; asthma; lung allergy; inflammation; inflammatory disease; airway inflammation; allergy; impeded respiration; cystic fibrosis; CF; chronic obstructive pulmonary disease; COPD; allergy chinitis; acute respiratory distress syndrome; pulmonary hypertension; lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Miller S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sandrasagra A, Tang L, Aguilar D,
in S, Lu H, Cong H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-APR-2002; 2002WO-US013135.
23-APR-2002; 2002WO-US013143.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-JUL-2003; 2003US-00627930.
                                                  Human oligonucleotide #2056.
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nyce JW, Sandrasagra Shahabuddin S, Lu H,
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TANG L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MILLER S.
SHAHABUDDIN S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGUILAR D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NYCE J W.
                                                                                                                                                                                                                                                                                                                                                                                                               US2004049022-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CONG H.
                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
  15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-MAR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (NYCE/) 1
(SAND/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MILL/)
(SHAH/)
(LUHH/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (TANG/)
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Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codon, intron of respiratory disease-relevant gene e.g. CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory disease e.g. WPI; 2004-293804/27.

Claim 2; SEQ ID NO 2156; 174pp; English.

allergic rhinitis, acute respiratory distress syndrome, pulmonary hypertension, lung inflammation, bronchitis, airway obstruction or bronchoconstriction. This sequence represents an oligonucleotide of the

Sequence 22 BP; 3 A; 5 C; 7 G; 7 T; 0 U; 0 Other;

; 0

Gaps

;

Indels

0; Mismatches

DB 1; Length 23;

Query Match

0.9%; Score 16.2; DB 1;
Best Local Similarity 85.7%; Pred. No. 4.3e+02;
Matches 18; Conservative 0; Mismatches 3,

850 CIGGACAAGGACCIGAAGCAG 870

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PCR primers AAA64535-36 were used to amplify a fragment of the human FEZ1 gene. FEZ1 is a tumour suppressor gene, located at chromosome location BP22. Decreased or no expression of FEZ1 is detected in a variety of cancer cells. Expression of FEZ1 inhibits tumour growth and proliferation. FEZ1 also interacts with tubulin, with microtubules, and with protein EPT-gamma. Post-translational phosphorylation and dephosphorylation modulates the effect of the FEZ1 protein. Inhibitors of FEZ1 gene expression are useful for inducing cells to proliferate.

Compounds which modulate FEZ1 association with tubulin are useful for alleviating tubulin hyper- or hypo-polymerisation disorders, such as those associated with aberrant initiation of mitosis, modulation of the initiation and rate of cell proliferation and cell growth, modulation of cell shape, cell rigidity, cell motility, rate and stage of cellular DNA replication, intracellular distribution of organelles, metastatic potential of cell and cellular transformation from a non-cancerous to cancerous phenotype. Compounds which modulate FEZ1 binding and
                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                   Human; FEZ1 gene; tumour suppressor gene; 8p22; cancer; tumour growth; tumour proliferation; tubulin; microtubule; protein EF1-gamma; tubulin polymerisation disorder; mitosis initiation; cell proliferation; cell growth; cell shape; cell rigidity; cell motility; DNA replication; tumorigenesis; tumour survival; metastasis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New polynucleotide homologous with a portion of one strand of the human FEZ1 gene, useful for alleviating abnormal cell proliferation such as
                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       phosphorylation are also useful for alleviating a disorder, such as
                                          .
  Length 22;
                                          Indels
                                                                                                                                                                                                                                                                                                                                                PCR primer G6 used to amplify exon 2 of human FEZ1 gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tumorigenesis, tumour survival, growth and metastasis
  Score 16.2; DB 1;
Pred. No. 4.1e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 23 BP; 3 A; 8 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 45; 255pp; English.
                                                                               535 AGCCCCATCTTTGACAAGCCC 555
                                                                                                                   22 Addccchrererdachdcac 2
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  0.9%;
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                                                                                                                                                                                                                          AAA64536 standard; DNA; 23
                                                                                                                                                                                                                                                                                                        (first entry)
                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-558396/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Croce CM, Ishii H;
Query Match
Best Local Similarity
Matches 18; Conserv
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                                                                                                                                                                                                                                                                  AAA64536;
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inflammation; immunological disease; haemopathy;
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                                                                                                                                                                     Xie Y;
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                                          Homo sapiens
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                                                               CN1347994-A.
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                       primer; ss.
                                                                                   08-MAY-2002
                                                                                                                                                                                                                                              infection
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                                                                                                                                                                    Mao Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 207
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                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes the human Zmax1 gene and the high bone mass (HBM) gene, which are found on chromosome 11q13.3. The Zmax1 and HBM genes have osteopathic activities. The genes can be used in gene therapy, antisense therapy and in the production of vaccines. They can be used in the diagnosis and treatment of bone disorders including osteoporosis, Paget's disease, sclerostosis, osteomalacia and fibrous dysplasia.

ABA82038 to ABA82700 and AAG68168 to AAG68193 represent sequences used in
                                                                                                                                              Human; high bone mass; HBM gene; Zmaxl gene; chromosome 11; 11q13.3; sequence tagged site; STS; osteoporosis; osteopathic; gene therapy; antisense therapy; vaccine; bone disorder; Paget's disease; adapter; sclerostosis; osteomalacia; fibrous dysplasia; PCR primer; linker; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                            New high bone mass (HBM) and Zmaxl genes and proteins useful for modulating bone mass for the treatment of e.g. osteoporosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.9%; Score 16.2; DB 1; Length 24; 55.7%; Pred. No. 4.5e+02; ve 0; Mismatches 3; Indels
                                                                                                                           Zmax1 gene region physical map preparation STS marker #501.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human p70 ribosome S6 kinase 26.29 RT-PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                   Johnson ML
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 37; 443pp; English.
                                                                                                                                                                                                                                                                                                                                                   Recker RR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         862 CTGAAGCAGTACCTGGATGAC 882
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CTGGAGAAGGCCCTGCAGCAG
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                                                               BP.
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2000US-00544398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         85.78;
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                                                               24
                                                                                                        (first entry)
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                                                               ABA82542 standard; DNA;
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Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                   WO200177327-A1
                                                                                                                                                                                                                                                                                                05-APR-2000;
05-APR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-JAN-2003
                                                                                                                                                                                                     Homo sapiens.
                                                                                                        25-JAN-2002
                                                                                                                                                                                                                                                        18-OCT-2001
                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABS55758;
                                                                                    ABA82542
             23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention discloses one new kind of polypeptide, human p70 ribosome 56 kinase 26.29, polynucleotides encoding this polypeptide and DNA recombination process to produce the polypeptide. The present invention also discloses the method of applying the polypeptide in treating various discases, such as malignant tumours, inflammations, immunological diseases, haemopathy and human immunodeficiency virus infection (HIV). The present invention also discloses the artegonist resisting the polypeptide and its treatment effect, and the application of the polyucleotides encoding human p70 ribosome 56 kinase 26.29. This sequence represents a reverse transcripates PCR primer used to isolate cDNA encoding the human p70 ribosome 56 kinase 26.29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
HIV human immunodeficiency virus; reverse transcriptase PCR; RT-PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New polypeptide human P70 ribosome S6 kinase 26.29 and encoding polynucleotides for treating malignant tumors, inflammations, immunological diseases, hemopathy and human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
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Pred. No. 4.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 2; Page 17 (Disclosure); 34pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BODE-) BODE GENE DEV CO LTD SHANGHAI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97 GITGCTCGCGCCCCCCCCC 117
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                                                                                                                                                                                                                                                                                                                                                                                                                            11-OCT-2000; 2000CN-00125684.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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Best Local Similarity 85.7'
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Human HBM STS marker forward primer #251.
                                                                                                                 (GENO-) GENOME THERAPEUTICS CORP. (UYCR-) UNIV CREIGHTON SCHOOL MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 42; 409pp; English.
                                                                                                                                                                                                          Little RD, Recker RR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        862 CTGAAGCAGTACCTGGATGAC 882
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and adapters of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACC45922 standard; DNA; 24 BP
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2001US-0291311P.
2002US-0353058P.
                                                           26-MAY-2000; 2000US-00578900.
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                                                                                                                                                                                                                                                                         WPI; 2002-097784/13.
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17-MAY-2001; 2
01-FEB-2002; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                             Carulli JP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-JUN-2003
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NAMES OF COLOR COL
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Sequence tagged site #501 used to prepare Zmax1 (LRP5) gene region map.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-MAY-2002; 2002WO-US014877.
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17-MAY-2001; 2001US-0291311P.
17-EBB-2002; 2002US-0353058P.
04-MAR-2002; 2002US-0361293F.
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                                                                                                                                                  WPI; 2003-129278/12.
                                                                                                          Bex FJ,
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                                                                (AMHP ) WYETH.
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                                                                                                          Babij P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADB98620
    8X44X4X6X6CCCCCCCCX8XX44444X8XXAXAX8XXAX8XX
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                                                                                                                                                                                                                                                                                                                                                                                                 lipid regulation comprising identifying a molecule that binds to or inhibite binding of a molecule to high bone mass (HBM) or its wild type gene, ZmaxI Compounds identified by the method are useful for treating, diagnoshing, preventing or screening for normal and abnormal lipid—associated conditions, including arteriosclerosis, cardiovascular disease, stroke, and osfeoporosis. The compounds may also be used in the treatment or prevention of diabetic atherosclerosis, neurovascular conditions caused by plaque build-up, poor circulation due to plaque build-up and associated poor wound healing. The methods may be used in gene therapy, pharmaceutical development, and diagnostic assays for bone development disorders. Molecules identified by comparison of ZmaxI and HBM systems can be used as surrogate markers in pharmaceutical cevelopment, in diagnosis of human or animal bone disease, and in the treatment of bone diseases. Sequences ABK22776-ABK23411 represent cDNA molecules incoding human ZmaxI and HBM, and PCR primers, probes, linkers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human, high bone mass, HBM; LRP5; LRP6; transgenic; bone mass modulation; gene therapy, bone density modulation; bone strength; trabecular number; bone size; bone tissue connectivity; bone disease; osteoporosis; PCR; osteomalacia; rickets; Paget's disease; neoplasm of the bone; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a method for identifying a molecule involved in
                                                                                                                                                                                                                                Identifying molecules involved in lipid regulation, useful for diagnosing, treating or preventing e.g., arteriosclerosis, comprises identifying a molecule that binds to high bone mass gene or its corresponding wild type gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.9%; Score 16.2; DB 1; Length 24; Best Local Similarity 85.7%; Pred. No. 4.5e+02; Matches 18; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                  Johnson ML;
25-MAY-2001; 2001WO-US016946.
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The invention relates to novel transgenic animals expressing the high bone mass (HBM) gene, expressing the corresponding wild type HBM gene, comprising an alteration of the gene encoding LRPS or LRPG, or expressing an LRPS that is modulated by an altered gene control sequence introduced can LRPS that is modulated by an altered gene control sequence introduced can LRPS that is modulated by an altered gene control sequence introduced control sequence introduced by homologous or non-homologous recombination. The transgenic animals are convention may have a use in cytostatic activity. The polynucleotides of the invention may have a use in gene therapy. The transgenic animals and mucleic acids are for the study of bone density modulation, where the bone mass is modulated relative to non-transgenic animals and composition transgenic animals of the same content is strength, trabecular number, bone size, or bone tissue connectivity. The transgenic animals, mucleic acids and methods are useful for identifying molecules involved in bone development, and for developing pharmaceutical compositions, which may be employed for treating or preventing bone diseases, e.g. osteoporosis, osteomalacia, rickets, paget's disease, or neoplasms of the bone. The transgenic animals and nucleic acids are also useful in methods for diagnosing diseases involved in bone development, and in the present sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New transgenic animals (e.g. mice), useful as models for studying bone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         density modulation, developing drugs for treating or preventing bone diseases (e.g. osteoporosis), or diagnosing diseases characterized by reduced bone density.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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0.9%; Score 16.2; DB 1; Length 24;
Best Local Similarity 85.7%; Pred. No. 4.5e+02;
Matches 18; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              used in the exemplification of the invention
                                                                                                                                                                                                                                                                  Bodine PV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 58; 603pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                862 CTGAAGCAGTACCTGGATGAC 882
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                                                                                                  (GENO-) GENOME THERAPEUTICS CORP
                                                                                                                                                                                                                                                                  Yaworsky PJ,
04-MAR-2002; 2002US-0361293P
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(GENO-) GENOME THERAPEUTICS CORP (AMHP ) WYETH.
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The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and
                                                                                                                                        New nucleic acid comprising a mutation in LRP5 or LRP6, useful for diagnosing a HBM-like phenotype in a subject and for preparing a composition for modulating bone mass and/or lipid levels in a subject
Morales A, Yaworsky
Graham JR,
                                                                                                                                                                                                                                                                                                                               Example 2; Page 64; 629pp; English.
                                                                                                                                                                                                                                                          suffering from e.g. osteoporosis.
Anisowicz A,
                                                                        WPI; 2003-129214/12.
Allen K,
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LRP6 mutants, which results in a HBM-like phenotype when expressed in a cell. The HBM-like phenotype results in bone mass modulation and/or lipid level modulation. The invention is useful for diagnosing a HBM-like phenotype in a subject and for preparing a composition for modulating bene mass and/or lipid levels in a subject suffering from e.g. osteoporosis. The present sequence is a Sequence Tagged Site (STS) marker, which was used to prepare a physical map of the Zmaxl (LRPS) gene Gaps ; 0.9%; Score 16.2; DB 1; Length 24; 35.7%; Pred. No. 4.5e+02; lve 0; Mismatches 3; Indels Sequence 24 BP; 6 A; 8 C; 4 G; 6 T; 0 U; 0 Other; 85.78; Local Similarity 85.7 nes 18; Conservative Query Match region.

862 CTGAAGCAGTACCTGGATGAC 882 1 CTGAACCACTACCTGTATGAC 21 Matches ð

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ADO23075 standard; cDNA; 19 AD023075; RESULT 210 AD023075

BP.

Human; ss; SDSO; short double stranded oligonucleotide; cleavage site; viral infection; malignant tumour; genetic disease; metabolic disease; gene chip; protein chip; microarray; gene drug; Dermogene; Lungene; Hepatogene; Lungene; Lungene; Lundene; Brostogene; Breatogene; Braintumogene; Skin-whitogene; short interfering RNA; siRNA; cancer; Human cyclin-dependent kinase 2, SDSO target region #5. 01-JUL-2004 (first entry) RNA interference 

Homo sapiens.

15-APR-2004.

US2004072769-A1.

16-SEP-2002; 2002US-00016490

16-SEP-2002; 2002US-00016490

O C NIX (/CNIX)

Yin JQ;

WPI; 2004-355427/33.

Designing and selecting short double-stranded oligonucleotides for treating viral infections, cancer and genetic or metabolic diseases, comprises using gene chip and protein chip microarrays to identify specific DNA sequences.

Example 1; Page 19; 58pp; English.

Liu W;

PJ,

tranded oligonucleotides, SDSO) as active pharmaceutical compositions tranded oligonucleotides, SDSO) as active pharmaceutical compositions for the treatment of viral infections, malignant tumours, and genetic and metabolic disease, comprising screening and identifying a specific DNA sequence in an abnormal gene encoding a protein with gene chip and specific plant sequence in an abnormal gene encoding a protein with gene chip and protein chip microarrays. The above method comprises screening the disease-causing genes, over-expressing in cells and/or tissues, with the disease-causing genes, over-expressing in cells and/or tissues, with the assistance of computer and specific DNA sequence within the annormal gene encoding a protein or playing other biological roles with the assistance of computer and specific DNA sequence, biological roles with the assistance of computer and specific software, biological roles with the assistance of computer and specific software, biological roles with the stem-loop of target mRNA with any related sequence of such as Dermogene, Lungene, Hepatogene, Leukogene, Lymphogene, Standed within the stem-loop of target mRNA with any related software, being not limited to part or all of the following components: single or components being not limited to part or all of the following components: single or components being not limited to part or all of the following components: single or and/or single-stranded RNA and/or DNA with the special pattern, 5. condensation of specific and efficacions small double-stranded oligonucleotides (SDSO), antisense oligonucleotide molecules or short interfering and selecting a special pattern that can be localised in any position of an oligonucleotide sequence evaluating the specific; of comprising identifying a special pattern that can be localised in any position of an oligonucleotide sequence evaluating the specificing componence of gaping pattern in viral infection, and efficially inactive and efficially inactive a group of corresponding genes in cells or The invention relates to screening, identifying or predicting, and assembling 19-25 nt double-stranded oligonucleotides (termed short double expression of genes in cells or tissues of humans or animals, such as viral infections, cancer, or genetic or metabolic diseases. The present sequence is a target region for an SDSO from an human cDNA.

Sequence 19 BP; 2 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

Gaps . 0 Score 16; DB 1; Length 19; Pred. No. 3.9e+02; 0; Mismatches 0; Indels 100.0%; Pre 0.9%; Conservative Local Similarity es 16; Conserv Query Match Best Loca Matches

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922 CTGTTCCAGCTGCTCC 937 crerrecascrecree 17

à

AAT67065 standard; DNA; 20 AAT67065; RESULT 211 AAT67065/ 

BP.

(first entry) 06-AUG-1997

Soluble type I insulin-like growth factor receptor 3' PCR primer.

Pype I insulin-like growth factor receptor; IGF-1R; tumour; melanoma; prostate cancer; ovary cancer; breast cancer; lung cancer; smooth muscle cancer; apoptosis; gene therapy; primer; PCR; polymerase chain reaction; ss.

Synthetic.

WO9718241-A1

22-MAY-1997.

10017621-3sl.rng

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A PCR fragment corresponding to human soluble type I insulin- like growth factor receptor [IGF-IR) (see also AAT67063) was created using mutagenic primers. The 5' primer (AAT67064) contains an artificial BamHI site and corresponds to nucleotides 135-153. The 3' reverse primer (AAT67065) contains 2 mismatches that result in the disruption of an AgeI site. The PCR fragment was used in the construction of vector pGRX-5x-3/IFGIRSO1. Soluble IGF-IR (see also AAW1582) was expressed as a GST fusion protein in E. coli BL21(DE3) transformants. Soluble IGF-IR can be used in methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Uridine diphosphate-N-acetylglucosamine; UDPAG; microbial; fermentation; uridine 5'-monophosphate; UMP; N-acetylglucosamine; AG kinase; drug;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a process for producing Uridine diphosphate-N-
                                                                                                                                                      - used for inducing
                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Microbial production of uridine diphosphate-N-acetylglucosamine
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                                                                                                                                                                                                                                                                                                                                                                                            0.9%; Score 16; DB 1; Length 20;
100.0%; Pred. No. 4.1e+02;
.ve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                        for inducing resistance to tumour growth in a mammal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Okuyama K,
                                                                                                                                                    Soluble type I insulin-like growth factor receptor resistance to tumour growth in a mammal.
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                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 2 A; 7 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Primer C used in the production of UDPAG.
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                                                                                               Dambrosio C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 6; Page 17; 38pp; Japanese
                                                                                                                                                                                               Example 2; Page 28; 65pp; English
                                                                                                                                                                                                                                                                                                                                                                                               0.5.,
100.08; Pt.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1100 GGTACCGGCCCCTGA 1115
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                                                                  (UYJE-) UNIV JEFFERSON THOMAS
             96WO-US018327.
                                       95US-0006699P.
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                                                                                                                                                                                                                                                                                                                                                                                                                           16; Conservative
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                                                                                               Baserga R, Resnicoff M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-243625/20.
                                                                                                                          WPI; 1997-289231/26
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Takenouchi K,
Noguchi T;
             13-NOV-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-AUG-1998;
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Matches
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acetylglucosamine (UDPAG). UDPAG is prepared by microbial fermentation from uridine 5'-monophosphate (UMP) and N-acetylglucosamine in the presence of N-acetylglucosamine Kinase (AG Kinase). Efficient production of UDPAG using N-acetylglucosamine as substrate. UDPAG is a key intermediate in the synthesis of oligosaccharides for use as drugs and functional materials. Sequences AAX31940 to AAX31953 represent primers
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                                                                                                                                                                                        Length 24;
                                                                                                                                                                                                                          5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; neuregulin 55; nervous system; development; neurctumour; inflammation; immunological disease; primer; ss.
                                                                                                                                                   Sequence 24 BP; 0 A; 4 C; 8 G; 12 T; 0 U; 0 Other;
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                                                                                                                                                                                      0.9%; Score 16; DB 1; 379.2%; Pred. No. 4.9e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human neuregulin 55 PCR primer SEQ ID NO 3.
                                                                                                                                                                                                                          0; Mismatches
                                                                                                             used during the course of the invention
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                                                                                                                                                                                                                                                               666 AGGCAAAAGCAAGCTCACAGACAA 689
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                                                                                                                                                                                                                          Conservative
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Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-MAY-2002
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ID ABL4
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1321 TACCCCAAGTACCGAGCCGAGGCC 1344

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oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fundautus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamoba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  particular sites and identifying if ligation of the oligonacleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonacleotide sequences used in the exemplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Detecting cancer involving dicogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the
                                                                                                                                                                                                                                                                                       Human, K-ras, PCR primer, probe, capture probe, mutation detection;
ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
infection; 21 hydroxylase deficiency; Turner Syndrome, obesity; cancer;
oncogene; tumour suppressor; human papillomavirus; forensic;
environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes a method (M1) for designing capture
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Designing capture oligonucleotide probes for use on a support complementary oligonucleotides hybridize with little mismatch.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Favis R, Kliman R;
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                                                                                                                                                                                                                                                Capture oligonucleotide Zip ID#374 oligo #2.
TACTCCAAGTACCCAGGCAATGCC 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 5; Fig 25; 300pp; English
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                                                                                                          ABI83145 standard; DNA; 24 BP.
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                                                                                                                                                                                                    (first entry)
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WPI; 2002-034366/04.

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Gaps
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0.9%; Score 16; DB 1; Length 24; 79.2%; Pred. No. 4.9e+02; tive 0; Mismatches 5; Indels
                                      19; Conservative
 Query Match
Best Local Similarity
Matches 19; Conservat
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Human, K-ras, PCR primer; probe, capture probe, mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                        Kliman
                                                                                       Capture oligonucleotide Zip ID#374 oligo #3.
                                                                                                                                                                                                                                                        Favis R,
1 AACGGGCTCATCACAGAGACGGGA 24
                                                                                                                                                                                                                                                        Gerry NP,
                                                                                                                                                                                                                                       (CORR ) CORNELL RES FOUND INC
                                                                                                                                                                                                       04-APR-2001; 2001WO-US010958.
                                                                                                                                                                                                                       14-APR-2000; 2000US-0197271P.
                                        ABI92410 standard; DNA; 24
                                                                       (first entry)
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                                                                        15-FEB-2002
                                                                                                                                                                                       25-OCT-2001
                                                                                                                                                        Synthetic.
                                                        ABI92410;
                       RESULT 21
ABI92410/
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The present invention describes a method (MI) for designing capture oligonucleotide probes (I) for use on a support to which complementary coligonucleotide probes (II) will hybridise with little mismatch, where (I) have meling temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents of e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 Mydroxylase deficiency, Turner Syndrome and Obseity defects.

Cancer is specifically associated with a gene selected from Brchl gene, cancer is specifically associated with a gene selected from Brchl gene, psi gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. as canning electron microscope and infrared microscope) the support at the paresness of the target nucleotide sequences. ABIS2074 to a presence or absence of the target nucleotide sequences. ABIS2074 to Designing capture oligonuclectide probes for use on a support complementary oligonuclectides hybridize with little mismatch. Claim 3; Fig 26; 300pp; English.

Gaps .. 0.9%; Score 16; DB 1; Length 24; 79.2%; Pred. No. 4.9e+02; tive 0; Mismatches 5; Indels Sequence 24 BP; 2 A; 8 C; 6 G; 8 T; 0 U; 0 Other; 19; Conservative Local Similarity Query Match Matches

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994 AACCIGCICATCAACGAGAGGGGA 1017

AACGGGCTCATCACAGAGACGGGA

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The present introduction describes a memory with the present introduction of probes (II) for use on a support to which complementary cligonuclectide probes (II) will hybridise with little mismatch, where cligonuclectide probes (II) will hybridise with little mismatch, where cligonuclectide probes (II) will hybridise with little mismatch, where coligonuclecture is caused by bacterial infectious agents for detections diseases caused by bacterial infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fundautus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

Concer involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, cancer is specifically associated with a gene selected from BRCA1 gene, cancer is not informantal monitoring, forensics and the food and feed industry, detecting comparises scanning (using e.g. a scanning cancer microscope and infrared microscope) the support at the
                                                                                                                                                                                                  Human, K-ras, PCR primer, probe, capture probe, mutation detection, ligase detection reaction; LDR, p53; BRCA1, BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome, obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes a method (M1) for designing capture
                                                                                                                                                              Capture oligonucleotide Zip ID#374 oligo #1.
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                                        ABI83144 standard; DNA; 24 BP
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                                                                                                                      (first entry)
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                                                                                                                                                                                                                                                                                                                               Synthetic.
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                                                                                ABI83144;
RESULT 216
                     ABI83144,
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Kliman R;

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Favis

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particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonucleotide sequences used in the exemplification
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                                                                                                                                                                                                                                                                  Sequence 24 BP; 2 A; 8 C; 6 G; 8 T; 0 U; 0 Other;
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coligonucleotide probes [1] for use on a support to which complementary oligonucleotide probes [1] will hybridise with little mismatch, where coligonucleotide probes [1] will hybridise with little mismatch, where coligonucleotide probes [1] will hybridise with little mismatch, where for detecting infectious diseases caused by bacterial infectious agents e.g. Cryptococcus neoforwans, Candida albicans and Aspergillus funigatuts, viruses e.g. T-call lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents castected from Onchoverva volvulus, Entamoeba histolytica and bracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

Concer involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, cancer is specifically associated with a gene selected from BRCA1 gene, cancer is specifically associated with a gene selected from BRCA1 gene, cancer is specifically associated with a gene selected from the food and feed industry, detecting comprises scanning (using e.g. a scanning callectron microscope and infrared microscope) the support at the particular sites and infrared microscope) the support at the probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABIRGO14 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABI97546 represent oligonucleotide sequences used in the exemplification
                                                                                                                                                                                                                                                                           Human, K-ras, PCR primer; probe, capture probe, mutation detection, ligase detection reaction, LDR; p53; BRCAL; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forenaic; environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 24 BP; 8 A; 6 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                     Capture oligonucleotide Zip ID#374 oligo #4.
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24 AACGGGCTCATCACAGAGACGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 3; Fig 26; 300pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gerry NP,
                                                                                                           BP.
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                                                                                                         ABI92411 standard; DNA; 24
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Best Local Similarity 79.24
Matches 19; Conservative
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994 AACCTGCTCATCAACGAGAGGGA 1017

08-JUN-2000

1 AACGGGCTCATCACAGAGACGGGA 24

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                                                                                                                              Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
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Representative examples of ribozyme recognition sites are given in AAA82412 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
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                                                                                                                                                                                                                                                                                                                                                                      cleaves
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RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PCNA and Cyclin B1.
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                           AAA83175 standard; DNA; 19
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Best Local Similarity 89.5
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
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                                                                                                                                                                                                                                                                                                                                                                         Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                   Robbins JM;
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                                                                                                                                                                                                        Disclosure; Page 57; 109pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cyclin D2 ribozyme binding site #4.
                                                                                                                                                                                                                                                                                                                                                                                                                               1029 GGCTGACTTTGGCCTGGCC 1047
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGCAGATTTTGGCCTGGCC 19
                                                                                                   Barber JR,
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                       99WO-US028772.
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                                                                                                   Welch PJ,
                                                                                                                           WPI; 2000-412314/35
                                                                          (IMMO-) IMMOSOF INC
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designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86797. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
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Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endomuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDKI, PCNA and Cyclin B1.
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                                                                                                                                                                            Length 19;
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                                                                                                                                                                        Score 15.8; DB 1; Length 1
Pred. No. 4.3e+02;
0; Mismatches 2; Indels
                                                                                                                                      Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                            993 GAACCTGCTCATCAACGAG 1011
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                                                                                                                                                                                                                                                                           1 GAACCTGCTCACCATCGAG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cdk7 ribozyme binding site #95.
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                                                                                                                                                                                          Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytchine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (11) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, dermarological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (11) are useful for treating proliferative skin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or hypertrophic burn
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                                                                                                                                                                                                                                                          Cyclin D2 ribozyme binding site SEQ ID NO:1893
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                                      AAH59469 standard; DNA; 19 BP.
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Matches 17; Conservative
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Gaps

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1027 CTGGCTGACTTTGGCCTGG 1045

17; Conservative

Matches

Local Similarity

CIGGCAGATITIGGCCIGG 19

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RESULT 223

AAH58336 standard; DNA; 19 BP. AAH5833( 

AAH58336;

(first entry) 10-SEP-2001

Human, ribozyme therapy, hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psorifasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:760,

Homo sapiens Synthetic.

sickle cell retinopathy; ss.

WO200130362-A2

03-MAY-2001

26-OCT-2000; 2000WO-US029500.

99US-0161532P. 26-OCT-1999;

(IMMU-) IMMUSOL INC.

Robbins JM, Tritz R;

WPI; 2001-300427/31.

Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.

Example 1; Page 127; 408pp; English.

The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, drimatological, cytostatic, antiseborrheic, antidiabetic, antisickling, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, cleaves RNA encoding cytokine involved in inflammation. (I) can be used cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention

Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

.; 0 Gaps ó 0.9%; Score 15.8; DB 1; Length 19; 39.5%; Pred. No. 4.3e+02; ive 0; Mismatches 2; Indels 0; Mismatches 89.58; 17; Conservative Query Match Best Local Similarity Matches

1 CTGGCAGATTTTGGCCTGG 19 

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RESULT 224 AAH58337

AAH58337 standard; DNA; 19

AAH58337;

(first entry) 10-SEP-2001

Cell-cycle dependent kinase cdk7 ribozyme binding site SBQ ID NO:761.

Human, ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.

Homo sapiens.

Synthetic.

WO200130362-A2

03-MAY-2001

26-OCT-2000; 2000WO-US029500

99US-0161532P 26-OCT-1999;

(IMMU-) IMMUSOL INC.

Robbins JM,

WPI; 2001-300427/31.

Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.

Example 1; Page 127; 408pp; English.

The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a cribozyme [1] which cleaves RNA encoding a cytckine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule [II] comprising a promoter operably linked to a nucleic acid segment encoding [I). [I) can have antiposoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. [I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detechment, and for treating and preventing proliferative eye diseases such as diabetic containing and prediction and solve the action of the second sec scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention

Seguence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

Gaps ; 0 0.9%; Score 15.8; DB 1; Length 19; 89.5%; Pred. No. 4.3e+02; tive 0; Mismatches 2; Indels 17; Conservative Query Match Best Local Similarity Matches

ö

Pred. No.

89.58;

Best Local Similarity

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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloprotainase (mMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell cardinoma and viral or seborrheic wart. They can solve be used for treating proliferative eye diseases such as diabetic
                                                                                                                                                                                                                                                                                                      Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target, ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatclogical; antiseborrheic; antidiabetic; virucide; antisckling; ophthalmological; keratolytic; gene therapy; virucide; actopic dermatilis, actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               kle cell retinopathy, retinopathy of
and for treating and preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                  Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:762.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 2 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               retinopathy, vitreoretinopathy, sickle cell prematurity and retinal detachment, and for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 127; 408pp; English.
  TGGCTGACTTTGGCCTGGC 1046
                         TGGCAGATTTTGGCCTGGC 19
                                                                                                                                           AAH58338 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-OCT-2000; 2000WO-US029500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-0161532P
                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tritz R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-300427/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200130362-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Robbins JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-MAY-2001.
                                                                                                                                                                                                                           10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
1028
                                                                                                                        AAH58338
                                                                                                                                                             Db
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0.9%; Score 15.8; DB 1; Length 19;

Query Match

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                                                                                                                                                                                                                                                                                                                short interfering nucleic acid; siNA; downregulation; vascular endothelial growth factor receptor; VERFR; antiangiogenic; cytostatic; endothelial growth factor receptor; VERFR; antiphosoriatic; nephrotropic; gynaecological; angiogenesis-associated condition; cancer; dabbetic retinopathy; macular degeneration; neovascular glaucoma; arthritis; psoriasis; endometriosis; angiofibroma; polycystic kidney disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The siNAS have antianglogenic, cytostatic, antidiabetic, ophthalmological, antiarthritic, antipsoriatic, nephrotropic and gynaecological activities. The siNA are useful for modulating (downregulating) the expression of VEGFR genes. The siNA are potentially useful for treating a wide range of anglogenesis associated conditions, particularly cancers, diabetic retinopathy, macular degeneration,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nuclaic acid (siNA) that downregulates expression of the vascular endothelial growth factor receptor (VEGFR) gene. Also described: (1) a siNA that downregulates the VEGF gene, (2) kits for in vitro or in vivo delivery of siNA, (3) conjugates and/or complexes of siNA, (4) vectors that express siNA, and (5) single-stranded siNA with similar properties.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates the vascular endothelial growth factor receptor gene.
                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes a double-stranded short interfering
                                                                                                                                                                                                                                                                    Human VEGFR2 short interfering nucleic acid (siNA) SEQ ID NO:1046.
                             ;
                             Indels
4.3e+02;
                                                                                                                                                                                                                                                                                                 double-stranded short interfering nucleic acid;
                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 3; SEQ ID NO 1046; 207pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen J, Beigelman L, Pavco P;
                                                         GGCTGACTTTGGCCTGGCC 1047
                                                                                         1 GGCAGATTTTGGCCTGGCC 19
                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002US-0363124P.
2002WS-0360762P.
2002US-0393796P.
2002US-0393784P.
2002US-0408784P.
2002US-0408784P.
2002US-0408784P.
2002US-0408784P.
                                                                                                                                                                       ADF36757 standard; RNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-FEB-2003; 2003WO-US005022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2002US-0358580P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                      (first entry)
                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-679876/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003070910-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-JUL-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-JAN-2003;
                        17;
                                                                                                                                                                                                                                      12-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                      ADF36757;
                                                           1029
                                                                                                                                         RESULT 226
                            Matches
                                                                                                                                                          ADF36757
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                                                                                                                                                                                                                                                                                                                                                                                                                                          double-stranded short interfering nucleic acid; short interfering nucleic acid; siNA; downregulation; vascular endothelial growth factor receptor; VEGFR; antiangiogenic; cytostatic; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; nephrotropic; gynaecological; angiogenesis-associated condition; cancer; diabetic retinopathy; macular degeneration; neovascular glaucoma; arthritis; psoriasis; endometriosis; angiofibroma;
 endometriosis, angiofibroma, also be useful for diagnosis,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      double-stranded interfering nucleic acid, useful e.g. for treatment diagnosis of cancer, downregulates the vascular endothelial growth
                                               (e.g. c
in the
                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention describes a double-stranded short interfering nucleic acid (siNA) that downregulates expression of the vascular
                                                                                                                                                                                                                                                                                                                                                                                                                  Human VEGFR2 short interfering nucleic acid (siNA) SEQ ID NO:1370
neovascular glaucoma, arthritis, psoriasis, endometriosis, angicand polycystic kidney disease. The siNA may also be useful for darus screening, target identification and validation, genetic engineering, studying gene function, and also for gene mapping single-nucleotide polymorphisms). The present sequence is used exemplification of the present invention.
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                                                                                                                                             0.9%; Score 15.8; DB 1; Length 19; 58.4%; Pred. No. 4.3e+02;
                                                                                                                                                                             Indels
                                                                                                              Sequence 19 BP; 1 A; 5 C; 8 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                           4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 3; SEQ ID NO 1370; 207pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beigelman L, Pavco P;
                                                                                                                                                                                                          1033 GACTTTGGCCTGGCCCGAG 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11.-MAR.-2002; 2002US-363124P.
29-MAY-2002; 2002WG-US017674.
06-UUN-2002; 2002WG-0386782P.
09-JUL-2002; 2002US-0393498P.
29-JUL-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-0408378P.
04-NOV-2002; 2002US-0409239P.
                                                                                                                                                                                                                                        cacumoccumoccccocc 19
                                                                                                                                                                                                                                                                                                                     BP.
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2002US-00306747.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-FEB-2003; 2003WO-US005022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2002US-0358580P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-JAN-2003; 2003US-0440129P
                                                                                                                                                          68.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                    ADF37081 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-679876/64.
                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003070910-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                  12-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-AUG-2003
                                                                                                                                                                             13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                   ADF37081;
                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                      RESULT 227
                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                       ADF37081,
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endothelial growth factor receptor (VEGFR) gene. Also described: (1) a sink that downregulates the VEGF gene; (2) kits for in vitro or in vivo delivery of sink,; 3) conjugates and/or complexes of sink, (4) vectors that express sink, and (5) single-stranded sink with similar properties. The sinks have antiangiogenic, cytostatic, antidiabetic, ophthalmological, antiathrhitic, antipsoriatic, nephrotropic and gynaecological activities. The sink are useful for modulating (downregulating) the expression of VEGFR genes. The sink are potentially useful for treating a wide range of angiogenesis-associated conditions, particularly cancers, diabetic retinopathy, macular degeneration, neovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma, and polycystic kidney disease. The sink may also be useful for diagnosis, and polycystic kidney disease. The sink may also be useful for diagnosis, diagnering studying gene function, and also for gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence is used in the exemplification of the present invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          genome, useful
behavioral traits
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           genome; genomic marker; radiation hybrid map; identification; nosome location; gene marker; polymorphic microsatellite marker;
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0
                                                                                                                                                                                                                                                                                                                                                                                                            Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dog genomic marker oligonucleotide sequence SEQ ID NO:474.
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                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 5 A; 8 C; 5 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                        Score 15.8; DB 1;
Pred. No. 4.3e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              phenotype; behaviour; pedigree; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1033 GACTTTGGCCTGGCCCGAG 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 73; 87pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
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                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.9%;
Best Local Similarity 89.5%;
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Canis familiaris.
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RESULT 230

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes a radiation hybrid map of the dog (Canine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      familiaris) genome comprising the genome location of a marker selected from AAA66139 to AAA66942. The radiation hybrid map is useful for identifying and localising dog genes, since it covers approximately 80 % of the dog genome and provides a dense map integrating different types (i.e. Type I and Type II) of markers. The map and the dog genome markers for complementary sequences) are especially useful to identify genes responsible for phenotypic and behavioural traits in dogs, to identify morbid genes, to analyse diseases and identify implicated genes in such diseases and their alleles, and to study dog pedigrees. They may also be useful for isolating corresponding human gene sequences e.g. genes
useful for isolating corresponding human gene sequences e.g. genes involved in genetic diseases
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                                                                                                                                                                                                                                                                                                                                                                                                                                  Dog; genome; genomic marker; radiation hybrid map; identification; chromosome location; gene marker; polymorphic microsatellite marker; phenotype; behaviour; pedigree; ss.
                                                                                                                                                   Gaps
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                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                    Dog genomic marker oligonucleotide seguence SEQ ID NO:386.
                                                                                                                                                 2; Indels
                                                                               Seguence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                             Score 15.8; DB 1;
Pred. No. 4.5e+02;
0; Mismatches 2;
                                                                                                                                                                                 1437 GGATGCCATGAAACATCCA 1455
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                                                                                                                                                                                                            GGATTCCATGAGACATCCA 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                involved in genetic diseases
                                                                                                                              89.28;
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Best Local Similarity 89.59
The Conservative
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                                                                                                                                                                                                                                                                    RESULT 229
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel antisense compounds capable of modulating expression of daxx useful for diagnosis, prophylaxis and treatment of diseases associated with expression of daxx.
                                                                                                                 Human daxx inhibitory antisense phosphorothioate oligonucleotide SEQ:35.
                                                                                                                                                Antisense oligonucleotide; daxx; inhibition; phosphorothioate;
Fas binding protein; CENP-C binding protein; dap6; EAP; cytostatic;
antiinflammatory; death associated protein 6; Ets-1 associated protein;
infection; inflammation; tumour formation; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDC2 gene antisense PCR primer SEQ ID NO:68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 229 AGTGGTGGTGGTGGCGCA 247
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               AAF72934 standard; DNA; 20 BP.
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                                                                                (first entry)
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Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                        Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-217744/22.
                                                                                                                                                                                                                                                                    US6180353-B1
                                                                                                                                                                                                                                    sapiens
                                                                                24-APR-2001
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                                                                                                                                                                                                                                                                                                     30-JAN-2001
                                                AAF72934;
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AAF72934
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The present invention describes a method for identifying a compound that induces senescence in a mammalian cell comprising culturing the cell in the presence and absence of the compound, assaying expression of at least one cellular gene (Gla) from 56 or a gene (G2) from 64 genes, with caresponding accession numbers given in the specification, and (Ga) corresponding accession numbers given in the specification, and (G2) is lower, in the presence of the compound. Also expression of (G2) is lower, in the presence of the compound. Also described: (1) a compound that induces senescence in a mammalian cell; (2) assessing efficacy of a treatment of a disease or condition relating to abnormal cell proliferation or neoplastic cell growth, (3) treating a disease or condition relating to abnormal cell proliferation or neoplastic cell growth, or (4) identifying a compound that inhibits senescence-associated induction of cellular gene expression. The compound is useful for treating or for assessing efficacy of treatment of a disease or condition relating to abnormal cell proliferation or neoplastic cell growth. The compound of the invention has a growth-inhibitory effect without producing systemic side effects found with cother growth-inhibitory compounds. ABQ74611 to ABQ74134 represent PCR
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Human, PCR primer, identification, tumour senescence, cytotoxic, ss, abnormal cell proliferation, neoplastic cell growth, growth-inhibitory.
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                                                                                                                                                                                                                                                                                                                                                                                                                            Identifying a compound that induces senescence in a mammalian p53 deficient or tumor cell comprises assaying expression of cellular ge in the presence of the compound with expression of the genes in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           primers which are used in an example from the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. 4.5e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 4; Page 50; 73pp; English.
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                                                                                                                                                                                                      21-DEC-2001; 2001WO-US050574.
                                                                                                                                                                                                                                         2000US-0257907P
                                                                                                                                                                                                                                                                   17-DEC-2001; 2001US-00257907.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            absence of the compound.
                                                                                                                                                                                                                                                                                                                                                 Chang B;
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                                                               sapiens.
                                                                                                                                                                                                                                              21-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                 Roninson IB,
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                                                                                                                                                                38-AUG-2002
                                                                                    Synthetic.
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has anticollammatory, antiallegic, antiasthmatic, hypotensive, immunosuppressive, and ovtostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel pharmaceutical composition, which has a first active agant comprising an oligonacleotide antiesns to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human, antisense; lung dysfunction; nasal airway dysfunction; antiallergic; antiallergic; antisthematory; steroid; ubiquinone; antiinflammatory; antiallergic; antisthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity;
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 6170; 872pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tang L, Shahabuddin S;
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                                                                                         sapiens.
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Miller S,
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0; Pharmaceutical composition for treating allments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or has antiinfinanty records and conjugations and conjugation and antiinfinant statements, antialized and cytostatic activity. The composition may have a use in antiense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of biquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention Human; antisense; lung dysfunction; nasal airway dysfunction; antitinflammatory; antiallergic; antitinflammatory; antiellergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; receptor; bronchodilation; bronchoconstriction; lung allergy; Gaps Pabalan J, Aguilar D; . 0 0.9%; Score 15.8; DB 1; Length 20; 39.5%; Pred. No. 4.5e+02; 2; Indels Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other; Disclosure; SEQ ID NO 14153; 872pp; English. ftp.wipo.int/pub/published\_pct\_sequences 0; Mismatches lung inflammation; respiratory disease; ds Katz E, Li Y, Sandrasagra A, K, Tang L, Shahabuddin S; 535 AGCCCCATCTTTGACAAGC 553 Human oligonucleotide sequence. ~ BP 23-APR-2002; 2002WO-US013135. 24-APR-2001; 2001US-0286137P. (EPIG-) EPIGENESIS PHARM INC. AGCCCCATGTGACAAGC 89.58; ABZ86780 standard; DNA; 20 (first entry) 17; Conservative WPI; 2003-229219/22. Local Similarity WO200285308-A2. 17-0CT-2003 31-OCT-2002 ubiquinone adenosine Miller S, ABZ86780; 20 Nyce JW, Query Match Matches Homo ABZ86780/ ò

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Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   has antiminatory, antiallergic, antiathmentory antialmentory, antialmentory, antialmentory, antialmentory, antialmentory, antialmentory, antialmentory, antialmentory, antialmentory, and cytostatic activity. The composition may have a present antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing pronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention
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receptor; bronchodilation; bronchoconstriction; lung allergy;
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adenosine receptor; bronchodilation; broncilung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                      Katz E,
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nes 17; Conservative
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                                                                  Homo sapiens.
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ABD31942/c
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WPI; 2003-093058/08. Nyce %X8646666666666666666666666666666678

ö Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other; 89.5%;

535 AGCCCCATCTTGACAAGC 553

beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer. Aguilar Pabalan J, Katz E, Sandrasagra A, 24-APR-2001; 2001US-0286036P. 23-APR-2002; 2002WO-US013143. (EPIG-) EPIGENESIS PHARM INC Li Y, Sar Tang L, WO200285309-A2 Homo sapiens 31-OCT-2002 Nyce JW, I Miller S,

ç oligonucleotide containing less percentage of adenosine, targeted t nucleic acids associated with lung airway or lung dysfunction, and Pharmaceutical composition for treating asthma, has antisense bronchodilating agent.

Claim 15; SEQ ID NO 14153; 763pp; English.

This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung expression of a target polypeptide associated with lung airway or lung dysfunction also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, of the invention has antiallergic, antiinflammatory, antiasthmatic, beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The composition and or availability, or to bronchocomerricion and/or lung and an administered in the lungs. The composition and or availability or an ending a pulmonary obstruction, and/or bronchocomerricion and/or lung and an ending a production and an ending and an ending a production and an ending and an ending and an ending a production and an ending and an ending and an ending and an ending an ending an ending an ending an ending a ending an ending an ending an ending an ending an end with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic thinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to inflammation, allergies and/or surfactant hypoproduction are associated thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, t brain, heart, kidney, etc, unwanted effects due to it prevent any

ö Gaps 0.9%; Score 15.8; DB 1; Length 20; 19.5%; Pred. No. 4.5e+02; Ive 0; Mismatches 2; Indels 8; DL 4.5e+02; Query Match Best Local Similarity 89.5' Matches 17; Conservative

Agccccargrandada 50

RESULT 236 ABD27158/c

BP. ABD27158 standard; DNA; 20

ABD27158;

29-JUL-2004

AA486518-derived oligonucleotide SEQ ID 6170.

analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer. respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; antisense; bronchoconstriction; allergy; hyposecretion; pain;

sapiens. Homo

Ď,

WO200285309-A2.

31-OCT-2002

23-APR-2002; 2002WO-US013143.

24-APR-2001; 2001US-0286036P. (EPIG-) EPIGENESIS PHARM INC

Aguilar D; Pabalan J, Katz E, Tang L, Shahabuddin S; Li Y, Sandrasagra A, Nyce JW, I Miller S,

WPI; 2003-093058/08.

S Pharmaceutical composition for treating asthma, has antisense oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and bronchodilating agent.

Claim 15; SEQ ID NO 6170; 763pp; English.

The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or mailgnant disease. The administered to reduce the production composition comprises oligo and is administered to reduce the production reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonuclectides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposeretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA.

Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

10017621-3sl.rng

Page 137

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This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoonstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery of the invention also describes a kit, that comprises: (a) a delivery of the invention has antiallergic, antiinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or mailgnant disease. The administered composition comprises oligo and is administered to reduce the production composition comprises oligo and is administered to reduce the production creduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated
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                                                                                                                                                                                                                                                                                                                                                                                                    Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; lumunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory discase; pulmonary vasoconstriction; respiratory distress syndrome; allergic fibritis; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; bronchitis; pulmonary transplantation rejection; ss; primer.
                                              Gaps
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0.9%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 4.5e+02;
ive 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                 Human myosin X-derived oligonucleotide SEQ ID 2022.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Li Y, Sandrasagra A, K
Tang L, Shahabuddin S;
                                                                                 1018 GAGCTCAAGCTGGCTGACT 1036
                                                                                                                         20 GAGCTCACCCTGGCTGACT 2
                                                                                                                                                                                                                                   ABD23010 standard; DNA; 20 BP
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                                                                                                                                                                                                                                                                                                                     (first entry)
                   Local Similarity 89.5
nes 17; Conservative
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Miller S,
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  Query Match
                        Best Loca
Matches
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with a disease or condition such as pulmonary vasoconstriction, inflammathion, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergie; pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           genes expressed within cells and tissues. The compound can also be used for treating diseases or conditions associated with requiem, preferably hyperproliferative disorder, e.g. cancer or a developmental disorder. The compound can also be used as prophylaxis, e.g. to prevent or delay infection, inflammation or tumour formation. The present sequence represents the human requiem antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a compound targeted to a nucleic acid molecule encoding requiem which specifically hybridises with the nucleic acid molecule encoding requiem and inhibits the expression of requiem. The compound, particularly the antisense oligonucleotide is useful in modulating the function of nucleic acid molecules encoding requiem. The antisense compound can also be used as tools in differential and/or combinatorial analyses to elucidate expression patterns of a portion or the entire complement o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  human, requiem; hyperproliferative disorder; cancer; developmental disorder; infection; inflammation; tumour formation; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense compound targeted to a nucleic acid molecule encoding requiem, useful for modulating expression of requiem or for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human requiem antisense oligonucleotide ISIS #152733.
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 4.5e+02;
0; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.9%; Score 15.8;
89.5%; Pred. No. 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 17; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cancer or developmental disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 929 AGCTGCTCCGTGGCCTGGC 947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19 AGCTGATCCGAGGCCTGGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-AUG-2002; 2002US-00212993.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-AUG-2002; 2002US-00212993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADJ46542 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.9
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bennett CF, Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-142666/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2004023385-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-FEB-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADJ46542;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ното
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADJ46542,
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(first entry)

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oulmonary hypertension; lung inflammation; bronchitis; oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                       Novel single or multiple target oligonucleotide anti-sense to e.g. initiation codons and introns of respiratory disease-relevant gener CCR1, RANTES, MCP4, useful for prophylaxis or treating respiratory
                                                                                                     airway inflammation, allergy, asthma, impeded respiration, cystic fibrosis, acute respiratory distress syndrome;
                                                                                         interleukin; IL-4 receptor; IL-5 receptor; lung disease;
                                                              Oligonucleotide associated to PDE4A #77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 2; SEQ ID NO 1650; 85pp; English.
                                                                                                                                                                                                                                                       25-JUL-2003; 2003WO-US023509.
                                                                                                                                                                                                                                                                                  29-JUL-2002; 2002US-0399076P
                                                                                                                                                                                                                                                                                                             (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  disease e.g., asthma.
                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-203534/19.
                                                                                                                                                                                                    WO2004011613-A2
                                                                                                                                                                                                                                                                                                                                        Nyce JW, Tang
Shahabuddin S,
                                                                                                                                                                           Homo sapiens.
                                    06-MAY-2004
                                                                                                                                                                                                                              05-FEB-2004
           ADJ60794;
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to a method for identifying a compound that induces senescence in a mammalian cell. The method comprises assaying the expression of cellular genes in the cell in the presence and absence of the compound. The method is useful for identifying and modulating diseases or conditions related to abnormal cell proliferation or neoplastic cell growth, in assessing the efficacy of the treatment of disease or condition, or in identifying compounds that induce senescence in mammalian cells or that inhibit senescence-associated induction of cellular gene expression. PGR primers ADH80400 were used to amplify genes that are up- or downregulated in doxorubicin-induced accelerated senescence to identify senescence-inducing compounds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Identifying compounds that induce senescence in mammalian cells, useful for treating e.g. cancer, comprises assaying the expression of cellular genes in the cell in the presence and absence of the compound.
                                                                  Gaps
                                                                 ..
                                                                                                                                                                                                                                                                                                  Cytostatic; human; senescence; tumour; PCR; primer; ss; CDC2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.9%; Score 15.8; DB 1; Length 20;
89.5%; Pred. No. 4.5e+02;
live 0; Mismatches 2; Indels
                                       Length 20;
                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
            Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;
                                      Score 15.8; DB 1;
Pred. No. 4.5e+02;
                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 4; SEQ ID NO 68; 102pp; English
                                                                                           GIGGIGGIGGCGCAGIGA 251
                                                                                                                     20 grgardardccccccccc2
                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                     03-JUL-2002; 2002US-0394121P.
                                                                                                                                                                                                                                                                                                                                                                                                         27-JUN-2003; 2003WO-US020425.
                                      0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UNII ) UNIV ILLINOIS FOUND.
                                                                                                                                                                                       ADH80344 standard; DNA; 20
                                                                                                                                                                                                                                                                       CDC2 PCR primer, SEQ ID 68.
                                                                                                                                                                                                                                            (first entry)
                                                                 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chang B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2004-091347/09.
                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                      WO2004005462-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Roninson IB,
                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                            06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                               15-JAN-2004
                                                                                                                                                                                                                  ADH80344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                           233
                                      Query Match
                                                                                                                                                             RESULT 239
                                                                 Matches
                                                                                                                                                                            ADH80344/c
                                                                                                                                                                                       X S
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genes e.g.,

Miller S;

Aguilar D,

L, Sandrasagra A, Lu H, Cong H;

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                                                                                                                                                                                                                                                                                                             chosen from airwy inflammation, allergy(ies), asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary diseases (COPD), allergic rhinitis (AR), acute respiratory distress syndrome (ARDS), pulmonary hypertension, lung inflammation, bronchitis, airway obstruction. The present sequence represents an oligonucleotide of the
                                                                                         interleukin (IL)-4 receptor, IL-5 receptor or salts of the digonal clotded and optionally surfactant operatively linked to the oligonucleotide and optionally surfactant operatively linked to the respiratory or lung disease, which involves administering to the airways of a subject an effective amount of an inhibitor. The oligonucleotide is useful for production of a medicament for the prevention and/or treatment of a respiratory or lung disease. The respiratory or lung disease is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
The present invention relates to an oligonucleotide anti-sense to eninitiation codon, coding region with 2-10 nucleotides of 5'-end and end of nucleic acid target comprising gene(s) chosen from e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 4.5e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         535 AGCCCCATCTTTGACAAGC 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Agccccargrergacaagc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADL16976 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nvention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL16976;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 241
ADL16976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2X2X5X
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Gaps

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1024 AAGCTGGCTGACTTTGGCC 1042

Local Similarity 89.5 les 17; Conservative

Best Loc Matches

AAACTGGCTGATTTTTGGCC 1

13

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ADJ60794 standard; DNA; 20 BP

RESULT 240 ADJ60794/c ID ADJ6075

10017621-381.rng

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microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor; microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective, antiinflammatory; neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological; immunomodulatory; cardiovascular; gene therapy; inflammation; halbaleiser's disease; arthritis; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; se.
                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gierse JK;
                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ischemia.
     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention is directed to antisense oligonucleotides which are trageted to a nucleic acid encoding Ran GYPase activating protein 1 and which modulate the expression of Ran GYPase activating protein 1. The invention is useful for preparing a composition for treating invention is useful for preparing a composition for treating typerproliferative disorder such as cancer. The invention is also useful in gene therapy. The present sequence is human Ran GYPase activating protein 1 antisense oligonucleocide.
                                                                                                                                                                                                 /note= "Phosphorothioate backbone where all cytidines are 5-methyl cytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New compound having a sequence targeted to a nucleic acid encoding Ran GTPase, useful for preparing a composition for treating hyperproliferative disorder, e.g., cancer.
                                  Ran GTPase activating protein 1; hyperproliferative disorder; cancer; gene therapy; antisense; phosphorothioate backbone; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
   Human Ran GTPase activating protein 1 antisense oligo ISIS #177788
                                                                                                                                                                                                                                                                                                                  /*tag= c
/mod_base= OTHER
/note= "2' -methoxyethyl (2' -MOE) nucleotides"
                                                                                                                                                                                                                                                                                    nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          / Match 0.9%; Score 15.8; DB 1; Length 20; Local Similarity 89.5%; Pred. No. 4.5e+02; Loss 17; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                    -MOE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                 /mod_base= OTHER
/note= "2' -methoxyethyl (2'
16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; SEQ ID NO 35; 45pp; English
                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                     'mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            733 GCACCCTGCACCGCCATCC 751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCATCCTGCACTGCCATCC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-JUL-2002; 2002US-00211859.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-JUL-2002; 2002US-00211859.
                                                                                                                                                                                                                                                     *tag= a
                                                                                                                                                    . .20
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-142629/14.
                                                                                                                                                                                                                                                                                                                                                                                    US2004022765-A1
                                                                                                                                 Key
modified_base
                                                                                                                                                                                                                                    modified base
                                                                                                                                                                                                                                                                                                  modified_base
                                                                                   Homo sapiens
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                     05-FEB-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Monia BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 242
ADM14338/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mcBES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 934.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid encoding inhibitis its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. MPGES-1 chimeric antidiabetic, immunomodulator, cardiant, neuroprotective,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                              /mod_base= OTHER
/note= "phosphorothioate linkages and all cytidine
residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
/note= "2'-O-methoxyethyls"
                                                                                                                                                                                                                                                                                                                     /mod_base= OTHER
/note= "2'-0-methocyethyls"
16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 4; SEQ ID NO 525; 132pp; English.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-SEP-2002; 2002US-0413549P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-SEP-2003; 2003WO-US030374
                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= c
                                                                                                                                                                                                                                                                                        *tag= a
                                      . .20
*tag=
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                                      modified_base
                                                                                                                                                                                                                                         modified base
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Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:525 chimeric; antisense oligonucleotide; phosphorothioate; human;

(first entry)

01-JUL-2004

ADM14338;

BP.

ADM14338 standard; DNA; 20

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antisense oligonucleotides and antisense compounds have cytostatic,
            antidiabetic, immunomodulator, cardiant, neuroprotective,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGUILAR D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LU H.
CONG H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2004049022-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TANG L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shahabuddin S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                         15-JUL-2004
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                                                                                                                                                                                                                                                                                    AD046283;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (NYCE/)
(SAND/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nyce JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (TANG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CONG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SHAH/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LUHH/
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                                                                                                                                                                                                                                      RESULT 244
                                                                                                                                                                                                                                                   AD046283/c
 В
                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                  chimeric; antisense oligonucleotide; phosphorothioate; human; microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor; microsomal prostaglandin E2 synthase; inhibitor; cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective; antiinflammatory; neuroprotective; nootropic; antiarthritic; vasotropic; ophthalmological; immunomodulatory; cardiovascular; gene therapy; inflammation; Alzheimer; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGBS-1). The human mPGBS-1 gene is located on chromosome 9, more specifically to 9d34.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGBS-1, which specifically hybridise with the nucleic acid mPGBS-1 and inhibits its expression, (2) a method of inhibiting the expression of mPGBS-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGBS-1. MPGES-1 chimeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
                                                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
/note= "phosphorothioate linkages and all cytidine
residues are 5-methylcytidines"
                                                                                                                                                Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:514.
                                                                                                                                                                                                                                                                                                                                                                                                            /mod_base= OTHER
/note= "2'-0-methocyethyls"
                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mod_base= OTHER
/note= "2'-0-methoxyethyls"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 4; SEQ ID NO 514; 132pp; English.
                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
  GGGCTACCTGGAGAGCTG 525
              GGCCTACCTGGGGAAGCTG 2
                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-SEP-2002; 2002US-0413549P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-SEP-2003; 2003WO-US030374
                                                                               ADM14327 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                 Synthetic.
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                                                                                                      ADM14327;
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                                                                     ADM14327
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antiinflammatory, neuroprotective, nootropic, antiarthritic, vasotropic, ophthalmological, immunomodulatory and cardiovascular activities, and can be used as mPGES-1 inhibitors and in gene therapy. The antisense compound can be used for preparing a composition for treating a disease or condition associated with mPGES-1 e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; ss; interleukin-4 receptor; IL-4; interleukin-5 receptor; IL-5; CCR1; CCR3; Eotaxin-1; RANTES; MCP4; CD23; ICAM; VCAM; tryptase a; tryptase b; PDB4 B; PDB4 C; PDB4 D; respiratory disease; lung disease; hyper-responsiveness; adenosine; adenosine A receptor; asthma; lung allergy; inflammation; inflammatory disease; airway inflammation; allergy; impeded respiration; cystic fibrosis; CF; chronic obstructive pulmonary disease; CODP; allergic rhinitis; acute respiratory distress syndrome; pulmonary phyertension; lung inflammation; bronchitis; airway obstruction; bronchoconstriction.
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Pred. No. 4.5e+02;
0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 4 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  507 GGGCTACCTGGAGAGCTG 525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19 GGCCTACCTGGGGAAGCTG 1
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                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.9%;
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human oligonucleotide #1649.
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SANDRASAGRA A.
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SHAHABUDDIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-293804/27.
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The invention relates to oligonucleotides anti-sense to an initiation codon, coding region, 5' or 3' intron-exon junction, intron or region with 2-10 mucleotides of the 5'-end or 3'-end of a mucleic acid target chosen from a gene encoding interleukin (IL) + receptor, interleukin (IL) - receptor, CCR1, CCR3, Ectaxin-1, RANTES, MCP4, CD23, ICAM, WCAM, LTYPtase a, tryptase b, PDE4 A, PDE4 B, PDE4 C or PDE4 D. The invention also relates to a method of screening a candidate compound that binds to one or more nucleic acid target(s) or expressed product(s), for the prevention and/or treatment of a respiratory or lung disease. The coligonucleotides are useful for reducing or inhibiting expression of a coligonucleotides are useful for reducing or inhibiting expression of a gene or mRNA encoding interleukin-4 receptor, interleukin-5 receptor, CCR1, CCR3, Ectaxin-1, RANTES, MCP4, CD23, ICAM, VCAM, tryptase a, tryptase b, PDE4 B, PDE4 C, or PDE4 D. The oligonucleotides are useful for reacting a respiratory or lung disease. The respiratory or lung disease is associated with hyper-responsiveness to and/or increased levels of, adenosine and/or levels of adenosine A receptor(s), and/or asthma and/or lung allergies associated with cinflammation or an inflammation, allergy, asthma, impeded respiration, cystic fibrosis (CF), chronic obstructive pulmonary disease (CCPS), allowed the contractive pulmonary disease (CCPS), allowed the contractive pulmonary disease. allergic rhinitis, acute respiratory distress syndrome, pulmonary hypertension, lung inflammation, bronchitis, airway obstruction or bronchoconstriction. This sequence represents an oligonucleotide of the ö Score 15.8; DB 1; Length 20; Pred. No. 4.5e+02; 0; Mismatches 2; Indels Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other; 535 AGCCCCATCTTGACAAGC 553 20 AGCCCCATGTGTGACAAGC 2 ADP18326 standard; DNA; 20 BP. 0.9%; (first entry) Query Match
Best Local Similarity 89.55 29-JUL-2004 ADP18326; RESULT 245 ADP18326/ à 임 

cytostatic; senescence; cell proliferation; neoplastic cell growth; cellular gene expression; reverse transcriptase PCR; RT-PCR; primer; ss; doxorubicin-induced sensescence; HCT 116 cell; human.

BTG2 gene antisense primer seqid 68.

Homo sapiens.

JS2004058320-A1.

25-MAR-2004.

21-DEC-2001; 2001US-00032264.

21-DEC-2000; 2000US-0257907P. 17-DEC-2001; 2001US-0341425P.

(RONI/) RONINSON I B. CHANG B. CHAN/)

Roninson IB, Chang B;

WPI; 2004-294237/27.

Identifying a compound that induces senescence in a mammalian cell, useful for treating abnormal cell proliferation, comprises assaying expression of a cellular gene in the cell in the presence and in the absence of a compound.

The invention describes a method of identifying a compound that induces senescence in a mammalian cell. The method comprises: culturing the mammalian cell in the presence and absence of the compound; assaying expression of at least one cellular gene selected from 73 genes given in the specification, in the cell in the presence and in the absence of the compound; and identifying compounds that induce senescence when expression of at least one of the cellular gene is higher in the presence of the compound that in the absence of the compound. Also described are: a compound that in the absence of the compound. Also described are: a compound that induces senescence in a mammalian cell identified from the method above; assessing efficacy of a treatment of a disease or condition relating to abnormal cell proliferation or neoplastic cell growth; and identifying a compound that inhibits senescence-associated induction of cellular gene expression. Compounds that induce senescence in abnormally proliferating to abnormal cell proliferation or neoplastic cells are useful for treating a disease or condition relating to abnormal cell proliferation or neoplastic cells growth. This sequence represents a reverse transcriptase of devertable and repressed follwing ö The invention relates to antisense oligonucleotides targeted to cyclindependent kinase 6, and which inhibit the expression of cyclin-dependent kinase 6. The antisense oligonucleotides are useful for treating a disease or condition associated with cyclin-dependent kinase 6, such as a Gaps New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding cyclin-dependent kinase 6, useful for treating cancer, bacterial/viral infection or conditions involving aberrant ·. 0.9%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 4.5e+02; tive 0; Mismatches 2; Indels Cyclin-dependent kinase 6, antisense oligonucleotide #222. antisense therapy; cyclin-dependent kinase 6; hyperproliferative disorder; cancer; bacterial infection; viral infection; apoptosis; ss; probe; human. Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other; doxorubicin-induced sensescence of HCT 116 cells. Example 2; SEQ ID NO 68; 29pp; English. Example 15; Page 33; 68pp; English. 1024 AAGCTGGCTGACTTTGGCC 1042 BP. 19 AAACTGGCTGATTTTGGCC 31-JUL-2002; 2002US-00210802. 31-JUL-2002; 2002US-00210802. ADO56158 standard; DNA; 20 (first entry) Best Local Similarity 89.5 Matches 17; Conservative (ISIS-) ISIS PHARM INC. Dobie KW; WPI; 2004-356241/33. US2004087523-A1. Homo sapiens 29-JUL-2004 06-MAY-2004, Freier SM, apoptosis. ADO56158; Query Match RESULT 246 AD056158  $\begin{smallmatrix} \mathbf{x} & \mathbf{x} & \mathbf{y} & \mathbf{y}$ ò a 

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Gaps

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hyperproliferative disorder (e.g. cancer), or conditions arising from bacterial or viral infections, or involving aberrant apoptosis. They are also useful in research and diagnostics for modulating the expression of cyclin-dependent kinase 6. The present sequence represents a cyclin-dependent kinase 6 antisense oligonucleotide. Note: Seqid 15-134 are also used in the sequence listing but these sequences do not match seqid 15-134 displayed in Tables 1 and 2 (page 30-34).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to antisense oligonucleotides targeted to cyclindependent kinase 6, and which inhibit the expression of cyclin-dependent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mod_base= OTHER
/note= "Phosphorothioate backbone, All cytidines are 5-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding cyclin-dependent kinase 6, useful for treating cancer, bacterial/viral infection or conditions involving aberrant
                                                                                                                                                                 Gaps
                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nucleotides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleotides
                                                                                                                                     Score 15.8; DB 1; Length 20;
Pred. No. 4.5e+02;
                                                                                                                                                                                                                                                                                                                                                                         Cyclin-dependent kinase 6, antisense oligonucleotide #156.
                                                                                                                                                                                                                                                                                                                                                                                                 antisense therapy; cyclin-dependent kinase 6;
hyperproliferative disorder; cancer; bacterial infection;
viral infection; apoptosis; 88; probe; human.
                                                                                                                                                                2; Indels
                                                                                                           Sequence 20 BP; 1 A; 9 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "2'-methoxyethyl (2'-MOE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note= "2'-methoxyethyl (2'-MOE)
                                                                                                                                                                0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 15; Page 31; 68pp; English.
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/mod_base= OTHER
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                                                                                                                                     Match 0.9%;
Local Similarity 89.5%;
Les 17; Conservative
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/mod_bag
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*tag=
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 apoptosis
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                                                                                                                                        Query Match
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            disease or condition associated with cyclin-dependent kinase 6, such as a hyperproliferative disorder (e.g. cancer), or conditions arising from bacterial or viral infections, or involving aberrant apoptosis. They are also useful in research and diagnostics for modularing the expression of cyclin-dependent kinase 6. The present sequence represents a cyclin-dependent kinase 6 antisanse oligonucleotide. Note: Seqid 15-134 are also used in the sequence listing but these sequences do not match seqid 15-134 are also 134 displayed in Tables 1 and 2 (page 30-34).
                                                                                                                                                                                                                                    ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              to jagged 1 (also known as serrate gene, JAG1, HJ1, AGS, AHD and AMS) and which modulate the expression of jagged 1. The invention is useful in diagnosing and treating hyperproliferative and developmental disorders. The invention acts as a cytostatic agent. The present sequence is human jagged 1 target oligonucleotide. This sequence is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jagged 1; serrate gene; JAG 1; HJ1; AGS; AHD; AWS; diagnosis; hyperproliferative disorder; developmental disorder; cytostatic; therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   present invention is directed to antisense oligonucleotides targeted
                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 compound targeted to a nucleic acid molecule encoding jagged 1, in in diagnosing and treating hyperproliferative disorder.
The antisense oligonucleotides are useful for treating a
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Pred. No. 4.5e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                    Indels
                                                                                                                                                                     Sequence 20 BP; 5 A; 5 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                               Score 15.8; DB 1;
Pred. No. 4.5e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human jagged 1 target oligonucleotide #4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 51; 40pp; English.
                                                                                                                                                                                                                                                                     1031 CTGACTTTGGCCTGGCCG 1049
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dobie KW;
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                                                                                                                                                                                                                                                                                                   N
                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GATAACTGTGCGAACATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.9%;
                                                                                                                                                                                                    Query Match
Best Local Similarity 89.5%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                       CTGACTTCGGCCTTGCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-NOV-2002; 2002US-00304082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-NOV-2002; 2002US-00304082
                                                                                                                                                                                                                                                                                                                                                                                         ADP68073 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-399731/37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2004102401-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 human; ss.
                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                           ADP68073;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      useful
                                                                                                                                                                                                                                                                                                                                                        RESULT 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New
                                                                                                                                                                                                                                                                                                                                                                           ADP68073
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Page 143

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The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various bolymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocardial infarction, coronary heart disease, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also useful in forenaics, paternity testing, genetic analysis and phenotype correlations to diseases. The present sequence is an example of one of
                                                                                                                                                                                 polymorphism, vascular disease, coronary artery disease, forensics, myocardial infarction, atherosclerosis, stroke, venous thromboembolism, pulmonary embolism, paternity test, ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and
                                                                                                                                                                                                                                                                                                                                                                            /standard_name= "single nucleotide polymorphism"
                                                                                                                                                                    Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Daley GQ,
                                                                                                                           Human gene single nucleotide polymorphism #2077.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the human gene SNPS shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bolk S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (WHED ) WHITEHEAD INST BIOMEDICAL RES. (MILL-) MILLENNIUM PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gargill M, Ireland JS,
                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example; Page 189; 242pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1027 CTGGCTGACTTTGGCCTGG 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
AAF97316 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                   replace (11, T)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-SEP-1999; 99US-0153357P.
26-JUL-2000; 2000US-0220947P.
16-AUG-2000; 2000US-0225724P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CICGGIGACTITGGCCIGG
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                                                                                  (first entry)
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Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-226749/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                 WO200118250-A2
                                                                                                                                                                                                                                                                       sapiens
                                                                                  06-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lander ES,
                                                                                                                                                                                                                                                                                                                                   Variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 251
                                                                                                                                                                                                                                                                         Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAH62396
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·;
                                                                                                                                                                                                                          Jagged 1; serrate gene, JAG 1; HJ1; AGS; AHD; AWS; diagnosis; hyperproliferative disorder; developmental disorder; cytostatic; therapy; human; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "Phosphorothioate backbone where all cytidines are 5-methyl cytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention is directed to antisense oligonucleotides targeted to jagged 1 (also known as serrate gene, JAG1, HJ1, AGS, AHD and AWS) and which modulate the expression of jagged 1. The invention is useful in diagnosing and treating hyperpoliferative and developmental disorders. The invention acts as a cytostatic agent. The present sequence is human jagged 1 antisense oligonucleotide. This sequence is used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New compound targeted to a nucleic acid molecule encoding jagged 1, useful in diagnosing and treating hyperproliferative disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag= a
/mod_base= OTHER
16.20
/*tag= c
/*mod_base= OTHER
/*nod_base= OTHER
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ó:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; Score 15.8; DB 1; Length 20; 89.5%; Pred. No. 4.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                   Human jagged 1 antisense oligonucleotide ISIS #171247.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 15; 40pp; English
                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               877 GATGACTGTGGGAACATCA 895
                                                                                                                                                                                                                                                                                                                                                                                                                                    /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATAACTGTGCGAACATCA 2
                                                          ADP68037 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-NOV-2002; 2002US-00304082.
                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                           ...20
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dean NM, Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-399731/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2004102401-A1
                                                                                                                                                                                                                                                                                                                                                                          Key
modified_base
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modified base

Homo sapiens

Synthetic.

12-AUG-2004

ADP68037;

RESULT 249 ADP68037/c

modified base

22-NOV-2002;

27-MAY-2004

Mccarthy JJ;

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0
                                                                                  Gaps
                                                                                  ·
0
                                    0.9%; Score 15.8; DB 1; Length 21;
89.5%; Pred. No. 4.7e+02;
tive 0; Mismatches 2; Indels
Sequence 21 BP; 2 A; 5 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                        AAH62396 standard; DNA; 21 BP.
                                                                                                                                                                                                                                                                                                                 AAH62396
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RXB

20

RESULT 250

Query Match

Best Loca Matches

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contain single nuclectide polymorphisms (SNRs). A method is included in the invention for analysing a nucleic acid sample, which consists of determining the base occupying any one of the polymorphic sites of in the SNR containing sequences. The nucleotide sequences can be used in the diagnosis or monitoring of diseases, such as cancer, inflammation, heart diseases, diseases of the cardiovascular system, and inflection by microorganisms. The oligonucleotides are also useful in the manufacture of a medicament for the treatment or prophylaxis of the diseases, and as a pharmaceutical. SNP containing oligonucleotides are useful in medicine such as phenotype correlation, forensics, paternity testing, medicine and genetic analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA sequences AAH62100 - AAH62688 represent segments of human genes which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New nucleic acid segments of the human genome, particularly from genes including polymorphic sites, for phenotype correlation, forensics, paternity testing, medicine and genetic analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Revised record issued on 09-SEP-2004 : Correction to Feature Table Key
                                                                                          Single nucleotide polymorphism; SNP; human; cancer; inflammation;
                                                                                                                                                                                                                        /*tag= a
/standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.9%; Score 15.8; DB 1; Length 21; 89.5%; Pred. No. 4.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                           heart disease; paternity testing; forensic science; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 5 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
                                                             NFE2L1 polymorphism containing DNA fragment #297.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                (WHED ) WHITEHEAD INST BIOMEDICAL RES.
                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                Lander ES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 53; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAGGACCTGCAGCGTGAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             43 GGAGGACCAGCAGTGTGAC 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human NOVX DNA PCR primer #120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABX72455 standard; DNA; 22 BP
                                                                                                                                                                                                                                                                                                                                 17-NOV-2000; 2000WO-US031639.
                                                                                                                                                                                                                                                                                                                                                                  99US-0167334P
                               (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                 Ireland JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-367705/38.
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                                                                                                                                                           Unidentified
                                                                                                                                             sapiens
                                                                                                                                                                                                                                                                                                     31-MAY-2001
              09-SEP-2004
                               12-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                Cargill M,
                                                                                                                                                                                                         variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABX72455;
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                                                                                                                                             Homo
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Human; NOVX; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD; hypertension; congenital heart defect; acrtic stenosis; valve disease; ratial septal defect; arrioventricular canalidefect; ductus arteriosus; pulmonary stenosis; subacrtic stenosis; ventricular septal defect; VSD; tuberous sclerosis; scleroderma; atherosclerosis; infectious disease; baskinson's disease; immune disorder; haematopoietic disorder; primer; haemophilia; hypercoagulation; Crohn's disease; cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          UM, Spytek KA;
Vernet CAM, Zerhusen BD;
on G, Burgess CE, Gerlach V;
Taunier RJ, Casman SJ, Ji W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Stone DJ;
, Peyman i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kekuda R, Miller CE, Malyankar UM, Spytek Jian M, Liu X, Gusev VY, Li L, Vernet CAM, L. Shenoy SG, Pena CEA, Smithson G, Burges! By Shimkets RA, Gangolli EA, Taupier RJ, n DM, Leite MM, Rastelli L, Edinger SR, Stall JR, Rothenberg ME, Mazur A, Millet I,
                                                                                                                                                                                                                                                                                                                                                                                                  2001US - 0281086P - 2001US - 0281136P - 2001US - 0281136P - 2001US - 02812906P - 2001US - 0282390P - 2001US - 0285341P - 2001US - 0285748P - 2001US - 028690P - 2001US - 028629P - 2001US - 2001US - 028629P - 2001US - 20
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200105-0284257P
200105-0294164P
200105-0294884P
200105-0298922P
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2001US-0318750P.
2001US-0324800P.
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2001US-0325684P.
2001US-0330143P.
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2002US-0345783P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-046858/04.
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Anderson DW, Le
Macdougall JR, E
                                                                                                                                                                                                                                                              WO200281498-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-APR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        32-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-APR-2001;
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                                                                                                                                                                                                                     Homo sapiens
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New isolated NOVX polypeptide useful for treating atherosclerosis, metabolic disorders, diabetes, obesity, infectious disease, anorexia, neurodegenerative disorders, Alzheimer's disease and cancer.

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Gaps

0;

Example 83; Page 545; 666pp; English

cardlomyopathy, diabetes, hypertension, congenital heart defects, aortic stenosis, atrial septal defect (ASD), atrioventricular canal defect, ductus arteriosus, pulmonary stenosis, subaortic stenosis, ventricular septal defect (VSD), valve diseases, tuberous sclerosis, scleroderma, atherosclerosis, obesity, infectious disease, anorexia, neurodegenerative disorders. Alzheimer's disease, parkinson's disease, immune disorders, haematopotetic disorders, hamophilia, hypercoagulation, Crohn's disease and cancer. This sequence represents a PCR primer used to amplify a human The invention relates to human polypeptides, termed NoVX, and the polyprolectides encoding them. The polypeptides and polymucleotides are useful for diagnosing disease, and screening for potential therapeutic agents. The sequences are useful for treating metabolic disorders, 22; Sequence 22 BP; 4 A; 8 C; 4 G; 6 T; 0 U; 0 Other; NOVX polynucleotide of the invention \$

2; Indels 0.9%; Score 15.8; DB 1; Length 89.5%; Pred. No. 4.9e+02; tive 0; Mismatches 2; Indels 846 GTACCTGGACAAGGACCTG 864 17; Conservative Query Match Best Local Similarity Matches

.; 0

Gaps

0;

20 GTACCTGGAGAGTACCTG 2 셤

AAH47509 standard; DNA; 23 AAH47509; AAH47509 

BP

Forward primer used in the construction of plasmid pSM847. (first entry) 30-NOV-2001

Cloning vector; pSM843; rep gene; ORF81; trbA; parA; cad operon; antibiotic resistance; cadmuim; SoxA; SoxB; SoxC; sox enzyme; Rhodococcus; sulfur; fossil fuel; promoter; PCR primer; ss.

Synthetic.

EP1127943-A2

29-AUG-2001.

19-FEB-2001; 2001EP-00200582.

24-FEB-2000; 2000IT-MI000332.

(ENIE ) ENITECNOLOGIE SPA

Serbolisca LP,

Margarit Y RosI,

Plasmid vector of Rhodococcus for producing proteins such as enzymes involved in the removal of organic sulfur from fossil fuels, comprises a parA gene, genes encoding proteins involved in replication, and a genetic De Ferra F, Rodriguez WPI; 2001-551402/62.

Example 7; Page 8; 24pp; English.

The invention provides a cloning vector pSM843, comprising the rep genes ORF81 and trbA (encoding proteins involved in replication in Rhodococcus), the gene parA, and at least one gene which encodes a genetic marker (selected from the cad operon) that confers resistance to cadmuim or an antibiotic. The rep genes are useful for producing homologous or heterologous proteins of interest such as enzymes involved in the selective removal of organic sulfur from fossil fuels (SoxA, SoxB, SoxC), L-amino acids, enantiomorphs of chiral compounds and carboxylic acids in a microorganism. The proteins are preferably sox enzymes. Microorganisms such as Rhodococcus, Gordona and Nocardia containing the sox operon downstream to the constitutive promoter, in particular

0 Rhodococcus strain SMV114 CBS 102447, transformed with the vector are useful for removing organic sulfur from fossil fuels. The expression vector has high stability in the absence of selective pressure in the transformed strains of Rhodococcus. The present sequence represents a PCR primer used in the construction of the vector pSM847 Gaps antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian; anticonvulsant; pulmonary disease; restencosis; Alzheimer's; Parkinson's; epilepsy; dementia; huntington's; amyotrophic lateral sclerosis; gene therapy; target; ss; CDK2. .; 0 Score 15.8; DB 1; Length 23; Pred. No. 5.1e+02; 2; Indels double-stranded short interfering nucleic acid; siNA; Sequence 23 BP; 7 A; 4 C; 7 G; 5 T; 0 U; 0 Other; Pred. No. 5.1e 0; Mismatches CDK2 siNA-target RNA - SEQ ID 30. 414 GAGAGTGCGTATGCGCAAC 432 5 dagadrgcarardcggaac 23 ADG29464 standard; RNA; 23 BP. 98.08 2002US-0358580P. 2002US-0363124P. 2002US-0386782P. 2002US-0406784P. 2002US-0408378P. 2002US-0409293P. 20-FEB-2003; 2003WO-US005028 26-FEB-2004 (first entry) 17; Conservative Sest Local Similarity WO2003074654-A2 29-AUG-2002; 05-SEP-2002; 09-SEP-2002; Unidentified 20-FEB-2002; 11-MAR-2002; 06-JUN-2002; 12-SEP-2003. ADG29464; Query Match Matches RESULT 254 ADG29464 8×888888 à 셤 

The invention relates to a double-stranded short interfering nucleic acid (siNA) molecule that down-regulates expression of an endogenous mammalian target gene comprising one or more chemical modifications and each strand of the double-stranded siNA comprises about 21 nucleotides. The siNA of New double-stranded short interfering nucleic acid molecule, useful for down-regulating the expression of an endogenous mammalian target gene or for treating diseases that respond to modulation of gene expression or the invention demonstrates antiarteriosclerotic, neuroprotective, nootropic, antiparkinsonian and anticonvulsant activities and may be useful for down-regulating the expression of an endogenous mammalian target gene and therefore in the treatment of any disease or condition that responds to modulation of gene expression or activity in a cell, tissue or organism. The disease or condition may include pulmonary Example 24; SEQ ID NO 30; 593pp; English. activity.

Beigelman L, Chowrira B, Pavco P, Fosnaugh K;

Thompson J;

Usman N,

Mcswiggen J,

Jamison S,

WPI; 2003-731676/69.

(SIRN-) SIRNA THERAPEUTICS INC

2003US-0440129P.

15-JAN-2003;

8 qq

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The invention relates to human Myb protein 32 (AAM49156) and to nucleic acids encoding it (ABL55121). The protein has a molecular weight of 32 KD. The invention also relates to a method for the recombinant production of the protein, an antagonist of the protein, and the use of the protein, and the use of the protein, used in therapeutic applications. Myb protein 32 can be used in the treatment of a variety of diseases such as cancer and HIV (human immunodeficiency virus) infection. Sequences ABL55122-ABL55123 represent reverse transcription-PCR (RT-PCR) primers used in an exemplification of the invention to isolate human Myb protein 32 cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Polypeptide-human Myb protein 32 and polynucleotide for coding it, useful for treating cancer, and HIV infection.
                                                                                                           Human, Myb protein 32, recombinant production, cancer, HIV infection, human immunodeficiency virus; gene therapy, cytostatic, anti-HIV; reverse transcription-PCR; RT-PCR; primer, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vascular endothelial growth factor receptor KDR RT-PCR primer #5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vascular endothelial growth factor receptor; KDR; VEGFRII; VEGFR, haematopoietic stem cell population; FCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.9%; Score 15.8; DB 1; Length 24; 89.5%; Pred. No. 5.3e+02; rive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 24 BP; 2 A; 12 C; 9 G; 1 T; 0 U; 0 Other;
                                                                          Human Myb protein 32 RT-PCR primer, SEQ ID NO:3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Page 17 (Disclosure); 33pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                             (BODE-) BODE GENE DEV CO LTD SHANGHAI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       558 CAGCCGCCGCCTCCGTCGT 576
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                                                                                                                                                                                                                                                                                                                   26-MAY-2000; 2000CN-00115890
                                                                                                                                                                                                                                                                                                                                                          26-MAY-2000; 2000CN-00115890
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                                       (first entry)
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les 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                    Xie Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-MAY-1999;
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                                       31-MAY-2002
                                                                                                                                                                                                                                      CN1325886-A.
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  ABL55122;
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Mao Y,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to human ribosomal protein S4-18.04 (see ABB98784). The protein and its coding sequence can be used for treating several diseases, such as malignant tumours, haemopathy, HIV infection, immunological disease and various inflammations. The present sequence is a PCR primer, which was used in an example from the invention
diseases such as restenosis, atherosclerosis, Alzheimer's disease, Parkinson's disease, epilepsy, dementia, huntington's disease or amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for gene therapy applications. The current sequence is that of the siNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; ribosomal protein S4-18.04; tumour; haemopathy; HIV infection; immunological disease; inflammation; cytostatic; anti-HIV; PCR; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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89.5%; Pred. No. 5.3e+02;
cive 0; Mismatches 2; Indels
                                                                                                                                                          Score 15.8; DB 1; Length 23;
Pred. No. 5.1e+02;
5; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 24 BP; 8 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                     Sequence 23 BP; 7 A; 6 C; 5 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human ribosomal protein S4-18.04 PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; Page 17 (Disclosure); 33pp; Chinese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC.
                                                                                                                                                                                                                                         1022 TCAAGCTGGCTGACTTTGG 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCTTTGACAAGCCCCTC 558
                                                                                                                                                                                                                                                               ABL55122 standard; DNA; 24 BP
                                                                                                                                                                                                                                                                                                                                                                                 ABV74691 standard; DNA; 24 BP
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                                                                                                                                                            Query Match

0.9%;

Best Local Similarity 63.2%;

Matches 12; Conservative 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-SEP-2000; 2000CN-00125506
                                                                              target DNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-SEP-2000; 2000CN-00125506
                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  encoding said polypeptide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-584314/63.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-FEB-2003
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RESULT 256 ABL55122 ID ABL5 XX

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Gaps

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31-JUL-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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                                                                                                                                      The present invention describes a method for preparing a cell population enriched for long-term repopulating human haematopoietic stem cells. The method comprises obtaining a population of cells from human haematopoletic tissue and isolating a population of KDR+ cells. KDR is a human vascular endothelial growth factor receptor (VEGFRII). The novel cell population can be used to inhibit rejection of a transplanted organ, by administering the KDR+ cells of the donor to a tissue recipient. The present sequence represents a reverse transcription PCR primer, which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; G-protein coupled receptor, GPCR; cardiomyopathy; atherosclerosis, diabetes; cell signal processing; metabolic pathway modulation; cancer; adenocarcinoma; lymphoma; prostate cancer; uterus cancer; asthma, immune response; neurodegenerative disorder; inflammatory disorder; Crohn's disease; multiple sclerosis; Albright hereditary osteodystrophy;
                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                                                                                               0.9%; Score 15.6; DB 1; Length 22; 81.8%; Pred. No. 5.3e+02; ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          Human G-protein coupled receptor, forward primer #76.
                                                                                                                                                                                                                                             Sequence 22 BP; 8 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                        used in an example from the present invention
                                                                                                                                                                                                                                                                                                        47 GACCAGCAGTGTGACTGCTGAA 68
                                                                                                                                                                                                                                                                                                                            GACAAGGAGTGTGACCACTGAA 22
                                                                                                  Preparation of a cell population.
                            DI SANITA
                                                                                                                      Example, Page 45; 83pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0257876P.
2001US-0259743P.
2001US-0260718P.
2001US-0261498P.
2001US-0263689P.
                  (UYJE-) UNIV JEFFERSON THOMAS (SUPE-) INST SUPERIORE DI SAN
                                                                                                                                                                                                                                                                                                                                                                               BP
98US-0087153P.
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2001US-0284591P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-DEC-2001; 2001WO-US049394
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                                                                                                                                                                                                                                                                                                                                                                               ABS59078 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                         Similarity 81.8
18; Conservative
                                                            ΰ
                                                          Peschle
                            (SUPE-) INST SUPERIOR (ZIEG/) ZIEGLER B L.
                                                                              WPI; 2000-086715/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer; PCR; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200259313-A2
29-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-JAN-2001;
08-FEB-2001;
22-FEB-2001;
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23-APR-2001;
19-JUN-2001;
                                                           Ziegler BL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-JAN-2001;
12-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
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04-JAN-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                  ABS59078;
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Best Local S
                                                                                                                                                                                                                                                                                                                                                           RESULT 258
                                                                                                                                                                                                                                                                           Best Loc
Matches
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The invention relates to novel isolated G-protein coupled receptor (GPCR)

polypeptides and polynucleotides. The GPCR polypeptide, GPCR nucleic acid
and antibody are useful for treating, preventing or alleviating a GPCR-
associated disorder or a pathological state in a subject, particularly a
human. In particular, the disorder is cardiomyopathy, atherosclerosis,
diabetes, or a disorder related to cell signal processing and metabolic

control of disorder related to cell signal processing and metabolic

control of disorder related to cell signal processing and metabolic

control publication. The GPCR polypeptide and nucleic acid are also useful

control of disorder sesence of or predisposition to a disease associated

with altered levels of GPCR, particularly cancer. The GPCR nucleic acid

control prypeptide are sespecially useful in therapeutic or prophylactic

applications for disorders associated with aberrant GPCR expression or
activity. The DNA encoding the protein is useful in gene therapy for

control of disorders. Furthermore, the nucleic acids and
colypeptides are useful in treating adenocarcinoma, lymphoma, prostate

cancer, uterus cancer, immune response, neurodegenerative disorders,
cancer, uterus cancer, immune response, neurodegenerative disorders,
cancer, uterus cancer, immune response, meurodegenerative disorders,
cancer, uterus cancer, immune response, meurodegenerative disorders,
cancer, uterus cancer, immune response, also useful in developing a

control of asterna, inflammatory disorders, contional analysis of various human disorders,
as well as in diagnostic applications. ABS58747-ABS59231 represent human

control of particulars and probes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                       Colman SD, Spytek KA;
Malyankar UM, Edinger S;
Macdougall JR, Gunther E;
                                                                                                                                                                                                                                                                                                                                                                                                                         New G protein coupled receptor polypeptides and polynucleotides, useful in gene therapy, particularly for treating or preventing cardiomyopathy, atherosclerosis, diabetes, multiple sclerosis, Crohn's disease or cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.9%; Score 15.6; DB 1; Length 22;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 22 BP; 3 A; 6 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No. 5.3e+02;
                                                                                                                                                       Padigaru M, Kekuda R,
M, Shenoy SG, Gusev V,
5, Stone DJ, Sciore P,
K, Gangolli BA, Millet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  820 GAGAAGTCCCTCACCCTTGTCT 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGGAAGTTCCTTACCCTTTTCT 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 9; Page 467; 685pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
16-AUG-2001; 2001US-0312902P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92WO-US006365.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91US-00738393.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ37360 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best_Local Similarity 81.8
Matches 18; Conservative
                                                                                                                                                                                            Vernet CAM,
                                                                                                                                                                                                                                     Smithson G,
                                                                                                                                                                                                                                                                          Ellerman K,
                                                                     (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-599789/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9303186-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-JUL-1992;
                                                                                                                                                                                        Casman SJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-MAR-2003
20-JUN-1993
                                                                                                                                                                                                                                                                          Peyman JA,
                                                                                                                                                                                                                                     Gerlach V,
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; 0

Gaps

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Indels

4

81.8%; Pred. No. 5.5e+02;

0; Mismatches

Best Local Similarity 81.8 Matches 18; Conservative

(HOFF ) HOFFMANN LA ROCHE INC.

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Sequence 23 BP; 7 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                            Sequence 23 BP; 8 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                      585 ATCTGAGATTGGCTTTGGGAAA 606
                                                                                                                                                                                                                                                                                                                                                                                                                           amplifying target regions and detecincludes universal bacterial probe.
                                                                                                                                                                                 1 AACTGAGATTGGCTTTAAGAGA 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 5; Page 29; 65pp; English.
                                                                     Example 5; Page 29; 65pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                           (HOFF ) HOFFMANN LA ROCHE INC
                                                                                                                                                                                                                                                                                                                                              92WO-US006365
                                                                                                                                                                                                                                                                                                                                                            91US-00738393
                                                                                                                                                                                                                        23
                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                         Conservative
                                                                                                                                                                                                                       AAQ37359 standard; DNA;
                                                                                                                                                                                                                                                    (revised)
                                                                                                                                                                                                                                                                                                                                                                                         Leong DU;
             Greisen KS, Leong DU;
                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1993-076541/09.
                           WPI; 1993-076541/09.
                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                              31-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                            31-JUL-1991;
                                                                                                                                                                                                                                                                                                                   WO9303186-A1
                                                                                                                                                                                                                                                    25-MAR-2003
                                                                                                                                                                                                                                                          20-JUN-1993
                                                                                                                                                                                                                                                                                                                                 18-FEB-1993
                                                                                                                                                                                                                                                                                                                                                                                         Greisen KS,
                                                                                                                                                         18;
                                                                                                                                                                                                                                                                                       Bacterium;
                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MAR-2003
                                                                                                                                                                                                                                      AAQ37359;
                                                                                                                                          Query Match
                                                                                                                                                         Matches
                                                                                                                                                                                                                  AAQ37359,
                                                                                                                                                                                                           RESULT
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base-pair mutations in a nucleic acid sequence by differentiating base-pair mutations in a nucleic acid sequence by differentiating heterorduplexes from homoduplexes. The method involves generating homoduplexes and heteroduplexes in a sample and performing gelectrophoresis on the sample using a polyacrylamide gel that causes comprises 3-20% polyacrylamide. 1-50% of at least one denaturing agent selected from alighatic alcohols, cyclic alcohols, alicyclic compounds, amides, ureas and carbamates, 10-100 mM borate-free TE [Tris-HG1, EDTA] buffer, and 10-100 mM taurine. The method has a high reliability and can be improved by allowing for the presence of the mutations in domains with high melting temperatures. These primers can specifically detect a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Detection of nucleic acid mutations - by electrophoresis in polyacrylamide gel that distinguishes heteroduplexes from homoduplexes
                                                                                                                                                                                                                                                                                                            IVS17 acceptor splice site; PCR primer; detection; base-pair mutation; heteroduplex; homoduplex; migration; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.9%; Score 15.6; DB 1; Length 23; 81.8%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mutation in the human IVS17 3'-acceptor splice site
                                                                                                                                                                                                                                                                         Human IVS17 3'-acceptor splice site PCR primer #9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
585 ATCTGAGATTGGCTTTGGGAAA 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  36 GIAGGCAGGACCAGCAGTG 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GAAGCCAGGAGCACCAGCAATG 22
                                       23 AACTGAGATTGGCTTTAAGAGA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Col 5; 16pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rock MJ, Prockop
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UYJE-) UNIV JEFFERSON THOMAS.
                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93US-00061574.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95US-00468551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADP11359 standard; DNA; 23
                                                                                                                                                 AAX02161 standard; DNA; 23
                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-179967/15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
es 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-MAY-1993;
                                                                                                                                                                                                                                   23-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                   US5874212-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ganguly A,
                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                           AAX02161;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADP11359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 262
                                                                                                          RESULT 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                AAX02161
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A series of synthetic probes were tested for their ability to hybridise to specific bacterial species in the CSF. For the detection of streptococcus agalactiae probe KG00001 lacking 2 bases from the 5' end gives an improved detection rate. See also AAQ37314-60. (Updated on 25-
                                                                                                                                                                                       A series of synthetic probes were tested for their ability to hybridise to specific bacterial species in the CSF. For the detection of Streptococcus agalactiae probe VP109 lacking 2 bases from the 5' end gives an improved detection rate. See also AAQ37314-59. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                             Detecting bacteria causing meningitis in cerebrospinal fluid - by amplifying target regions and detecting using panel of probes which includes universal bacterial probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Detecting bacteria causing meningitis in cerebrospinal fluid - by amplifying target regions and detecting using panel of probes which
                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cerebrospinal fluid; CSF; 16S rRNA; meningitis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Probe for Streptococcus agalactiae 16S rRNA gene fragments.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.9%; Score 15.6; DB 1; Length 23;
                                                                                                                                                                                                                                                                                                                                                               0.9%; Score 15.6; DB 1; Length 23; 81.8%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                         4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
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Gaps

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Query Match

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The present invention relates to diagnosing or monitoring transplant rejection, e.g. cardiac or kidney transplant rejection, in an individual comprises detecting the expression level of one or more genes. The methods, system and kits are useful in diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver, pancreas, pancreaticistet, lung, bone marrow or stem cell transplant rejection, and individual. The method is also useful in assessing the immune status of an individual. The methods are also useful in diagnosing and monitoring diseases that involve the immune system, e.g. rheumatoid arthritis, lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or viral, bacterial or fungal infection. The present sequence represents a Taqman probe for a 50 mer oligonoclectide marker for diagnosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic islet, lung, bone marrow or stem cell transplant rejection, in an individual, comprises detecting the expression level of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Single nucleotide polymorphism; SNP; single nucleotide primer extension; SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia; polycystic kidney disease; osteogenesis imperfecta; autoimmune disease;
                                                                                          transplant rejection; immune system; rheumatoid arthritis; lupus; inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match 0.9%; Score 15.6; DB 1; Length 23; Best Local Similarity 81.8%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          monitoring of allograft rejection and other disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 23 BP; 6 A; 12 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 58; SEQ ID NO 1368; 1762pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP specific upper PCR primer SEQ ID 3513.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                979 GACCICAAGCCCCAGAACCIGC 1000
                                                                                                                                                                                                                                                                                                                                                                                                     Woodward R,
                                                                                                                                                                                                                                                                                                                                                           EXPR-) EXPRESSION DIAGNOSTICS INC.
                                                        Tagman probe of the invention #42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCTCAACCACACAACCTGC 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAH40717 standard; DNA; 24 BP
                                                                                                                                                                                                                                                                 24-APR-2003; 2003WO-US012946.
                                                                                                                                                                                                                                                                                                      24-APR-2002; 2002US-00131831.
20-DEC-2002; 2002US-00325899.
                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                   Wohlgemuth J, Fry K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-400724/37.
                                                                                                                                                                                          WO2004042346-A2.
                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                    24-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                    Rosenberg S;
                   12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14-AUG-2001
                                                                                                                                                                                                                            21-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAH40717;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAH4071
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Prentice J, Morris M;

Ly N,

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Sequences AAH17205 - AAH40944 represent PCR primers, single nucleotide

CC primer extension (SNPE) primers, and the sequences of regions flanking

Sites of single nucleotide polymorphisms SNPs. The present invention

includes kits for determining the presence or absence of a SNP, using the

coligonucleotides of the invention. The PCR primers are used to amplify a

CC Planking sequence, the SNPE primer is used as a genotyping primer.

CC The oligonucleotides are useful for genotyping a nucleic acid sample by

performing a single-nucleotide primer extension reaction. The

cligonucleotides are useful for determining the presence, absence or

identity of a SNP and for genotype of an individual or group of

caused by one or more SNPs. Phenotypic trait suspected of being

caused by one or more SNPs. Phenotypic traits include diseases e.g.

agammaglobulinaemia, diabetes insipidus, lesch-Nyhan syndrome, muscular

dystrophy, familial hypercholesterolaemia, polycystic kidney disease,

csteogenesis imperfecta and acute intermittent porphyria. Phenotypic

ctraits also include symptoms of or susceptibility to multifactorial

cdisease of which a component is or may be genetic such as autoimmune

cdiseases, including, rheumatoid arthritis, multiple sclerosis,

microorganism. The method is also useful in forensic investigations and

conservative analysis. The present sequence represents a PCR primer specific

consequence or a numan SNP containing DNA sequence
acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Morphology regulator; dimorphic fungal cell; fungal host organism; recombinant protein expression; growth; low viscosity; protein secretion; filamentous fungus; PKAC; primer; ss;
                                                                                                                                                                                                                                                                                                                                                                                   New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 24 BP; 10 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mucor circinelloides PKAC, primer pkaCrev.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1310 AGACATACAACTACCCCAAGTA 1331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACACACACATCTACCCCAAGGA 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; Page 67; 83pp; English.
                                                                                                                                                                                                                                                             (ORCH-) ORCHID BIOSCIENCES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                            13-OCT-2000; 2000WO-US028436.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABS54362 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 81.8 es 18; Conservative
                                                                                                                                                                                                                                                                                                                                           WPI; 2001-290930/30.
                                                                                                                                                                                                                                                                                                 Picoult-Newburg L,
                                                                                                WO200129262-A2
                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                         acid sample.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABS54362;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 264
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Gaps

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4; Indels

0; Mismatches

Jacobsen MD;

Arnau J,

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The present invention relates to the isolation of polynucleotide sequences encoding at least one regulator of morphology and capable of regulating the morphology of a dimorphic fungal cell, and operably linked to a nucleotide sequence comprising an expression signal capable of directing the expression of the first sequence in a dimorphic fungal cell, where the sequences are not natively associated. The invention provides fungal host organisms capable of expressing recombinant proteins while at the same time exhibiting homogeneous growth and low viscosity characteristics. The fungal host organism has the capability for high protein secretion normally associated with filamentous fungi. The dimorphic fungal cells are useful for increasing production and/or secretion of large quantities of commercially valuable proteins. The present sequence represents a primer used in the examples of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fruit fly, LRR47 polypeptide 47-33.88; embryonic development deformity, tumour; diabetes; menstrual disorder; peptide ulcer; arrhythmia; anaemia; epilepsy; reverse transcriptase PCR; RT-PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated polynucleotide encoding at least one regulator of morphology capable of regulating the morphology of a dimorphic fungal cell, useful for producing and/or secreting large quantities of commercially valuable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 15.6; DB 1; Length 24; Pred. No. 5.8e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 24 BP; 2 A; 3 C; 2 G; 7 T; 0 U; 10 Other;
CAMP-dependent protein kinase A catalytic subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Poulsen U,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                974 ACCGAGACCTCAAGCCCCAGAAC 996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; Page 120; 296pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23 AYMGNGAYYTNAARCCNGARAAY 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Petersen JB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%;
                                                                                                                                                                                                                                                                            08-MAR-2002; 2002WO-DK000157.
                                                                                                                                                                                                                                                                                                                                            08-MAR-2001; 2001DK-00000395.
12-MAR-2001; 2001US-0274650P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BIOT-) BIOTEKNOLOGISK INST.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 52.2
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABK90912 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wolff AM, Appel KF,
                                                                   Mucor circinelloides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-723266/78
                                                                                                                                             WO200270721-A2
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Gaps

. 0

4; Indels

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The invention relates to an oligonuclectide array (I) comprising at least 25 different addresses (adapter sequences) with each comprising a different capture probe selected from a group consisting of the sequences given in ABQ00010-ABQ13409. (I) is useful for immobilising a target nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-
                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Array comprising adapter sequences useful for immobilizing or detecting a target nucleic acid sequence, has different addresses comprising different specific capture probes.
                                                                                                                                                                                                  The present invention relates to a new fruit fly LRR47 polypeptide 47-33.88. The polypeptide is useful for curing several diseases, such as embryonic development deformity, tumour, diabetes, menstrual disorder, peptide ulcer, arrhythmia, anaemia and epilepsy. The present nucleic acid sequence represents a reverse transcriptase (RT)-PCR primer that was used in the methods of the invention to isolate the coding sequence of the
                                                                                                                             fruit fly LRR47 polypeptide 47-33.88, useful for curing e.g. tumors and
                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                     Score 15.6; DB 1; Length 24; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oligonucleotide array; adapter sequence; probe; ss.
                                                                                                                                                                                                                                                                                                                         Sequence 24 BP; 1 A; 8 C; 13 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                          Example 3; Page 18 (Disclosure); 33pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide adapter/capture probe 10078
                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                     (SHAN-) SHANGHAI BIODOOR GENE DEV CO LID.
                                                                                                                                                                                                                                                                                                fruit fly LRR47 polypeptide 47-33.88
                                                                                                                                                                                                                                                                                                                                                                                                                    GGCACCCTGCACCGCCATCCGG 753
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29-AUG-2000; 2000US-0228854P.
                                                                                                                                                                                                                                                                                                                                                          0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-AUG-2001; 2001WO-US026519.
            05-SEP-2000; 2000CN-00125025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABQ10087 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 81.0.
Local 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ILLU-) ILLUMINA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-292068/33.
                                                                                                 WPI; 2002-520716/56.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABQ10087;
                                                                                                                                                                                                                                                                                                                                                                                                                       732
                                                                                                                                                 diabetes
                                                                      Mao Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABQ10087
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Oligonucleotide array; adapter sequence; probe; ss.

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27-AUG-2001; 2001WO-US026519. 25-AUG-2000; 2000US-0227948P. 29-AUG-2000; 2000US-0228854P.

WO200216649-A2.

28-FEB-2002

(ILLU-) ILLUMINA INC

Gunderson K;

Oligonucleotide adapter/capture probe 3106

11-JUN-2002

ABQ03115;

24

ABQ03115 standard; DNA;

ABQ03115

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ABQ13409) to a target nucleic acid to form a modified target nucleic acid and contracting the modified target nucleic acid with (I). The steps of above method is useful for detecting a target nucleic acid, which further comprises detecting the presence of the modified target nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an oligonucleotide array (I) comprising at least 25 different addresses (adapter sequences) with each comprising a different capture probe selected from a group consisting of the sequences given in ABQ00010-ABQ13409. (I) is useful for immobilising a target nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-ABQ13409) to a target nucleic acid to form a modified target nucleic acid and contacting the modified target nucleic acid with (I). The steps of above method is useful for detecting a target nucleic acid, which further comprises detecting the presence of the modified target nucleic acid,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    comprising adapter sequences useful for immobilizing or detecting a t nucleic acid sequence, has different addresses comprising
                                                                                                                                                             Gaps
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                                                                                                                       0.9%; Score 15.6; DB 1; Length 24;
31.8%; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 15.6; DB 1; Length 24;
81.8%; Pred. No. 5.8e+02;
ve 0; Mismatches 4; Indels
                                                                                                                                                           4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligonucleotide array; adapter sequence; probe; ss.
                                                                                   Sequence 24 BP; 7 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 24 BP; 4 A; 4 C; 9 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                    Oligonucleotide adapter/capture probe 10119
                                                                                                                                       Pred. No. 5.8e
                                                                                                                                                                                          542 TCTTTGACAAGCCCCTCAGCCG 563
                                                                                                                                                                                                                 3 TCCTGGACAGACCTCAACGG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        different specific capture probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 213; 261pp; English
                                                                                                                                                                                                                                                                                                                 ВР
                                                                                                                                       ilarity 81.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-AUG-2001; 2001WO-US026519.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-AUG-2000; 2000US-0227948P.
29-AUG-2000; 2000US-0228854P.
                                                                                                                                                                                                                                                                                                             ABQ10128 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ILLU-) ILLUMINA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-292068/33.
                                                                                                                                     Local Similarity
les 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200216649-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-FEB-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gunderson K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                 ABQ10128;
                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Array
                                                                                                                                                                                                                                                                              RESULT 267
                                                                                                                                                       Matches
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25 different addresses (adapter sequences) with a comprising a different addresses (adapter sequences) with a sequences different capture probe selected from a group consisting of the sequences given in ABQ00010-ABQ13409. (I) is useful for immobilising a target nucleic acid sequence by attaching a adapter nucleic acid (ABQ00010-ABQ13409) to a target nucleic acid to form a modified target nucleic acid and contacting the modified target nucleic acid with (I). The steps of above method is useful for detecting a target nucleic acid, which further comprises detecting the presence of the modified target nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Array comprising adapter sequences useful for immobilizing or detecting a target nucleic acid sequence, has different addresses comprising different specific capture probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to an oligonucleotide array (I) comprising at least
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
0
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llarity 81.8%; Pred. No. 5.8e+02;
Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 24 BP; 7 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Capture oligonucleotide Zip ID#1097 oligo #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    542 TCTTTGACAAGCCCCTCAGCCG 563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTGGACAAGACCCTCAACCG 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Page 118; 261pp; English.
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ID AB184591 standard; DNA; 24
XX
AC AB184591;
XX
XX
DT 15-FEB-2002 (first entry)
XX
XX
DE Capture oligonucleotide Zi
XX
Human; K-ras; PCR primer;
XW ligase detection reaction;
XW infection; 21 hydroxylase
XW infection; 21 hydroxylase
XW environmental monitoring;
XX
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-292068/33.
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Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 269
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Gaps

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TCTTTGACAAGCCCCTCAGCCG 563

542 22

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81.8%;

Local Similarity

Conservative

18;

Matches

TCCTGGACAAGACCCTCAACCG 1

RESULT 268

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Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.
                                                           (CORR ) CORNELL RES FOUND INC
                            04-APR-2001; 2001WO-US010958.
                                           14-APR-2000; 2000US-0197271P.
                                                                                                                                                                                                                                                                                                                                                                                                                                         ABI82867 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                             Local Similarity 81.8
es 18; Conservative
                                                                                                                                                                                                                                                                                                                          the present invention
                                                                         Barany F, Zirvi M,
                                                                                       WPI; 2002-034366/04.
WO200179548-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-FEB-2002
               25-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
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                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 270
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Matches
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infectious agents e.g. Cryptococcus and naturelymins initiatiza, immigration infectious agents e.g. Cryptococcus neoformans, Candida albicans and Sapergillus funigaturus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents completed from Onchoverva volvulus, Entamoeba histolytica and Dracunculus caslected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus companies. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting compaises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the companies of particular sites and indentifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes a method (M1) for designing capture oligonucleotide probes (1) for use on a support to which complementary oligonucleotide probes (1) will hybridise with little mismatch, where (1) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
                                                                                                                                                                                                                                                                                                                                                                                                                                            Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15.6; DB 1; Length 24;
81.8%; Pred. No. 5.8e+02;
tive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                      Kliman R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 24 BP; 3 A; 6 C; 8 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Capture oligonucleotide Zip ID#235 oligo #3.
                                                                                                                                                                                                                                                                                                                      Favis R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1118 TCCTGCTTGGGTCCACGGACTA 1139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 rcriecricegrecarecaes 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 5; Fig 25; 300pp; English.
                                                                                                                                                                                                                                                                                                                         Gerry NP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABI92132 standard; DNA; 24 BP.
                                                                                                                                                                                                                                                         (CORR ) CORNELL RES FOUND INC
                                                                                                                                                                                         14-APR-2000; 2000US-0197271P.
                                                                                                                            04-APR-2001; 2001WO-US010958.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the present invention
                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-034366/04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
WO200179548-A2
                                                                   25-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABI92132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
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à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             coligonucleotide probes (I) for use on a support to which complementary coligonucleotide probes (II) will hybridise with little mismatch, where coligonucleotide probes (II) will hybridise with little mismatch, where coligonucleotide probes (II) will hybridise with little mismatch, where coligonucleotide probes (II) will hybridise with little mismatch, where it can be a salmonella, listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Appergillus fundautus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus actives and polio virus, and parasitic infectious agents are captured in a slate of its also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.

Concer is specifically associated with a gene selected from BRAM gene, cancer is specifically associated with a gene selected from BRAM gene, method is also used for environmental monitoring, forensics and the food method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning captured and correlating (using a computer) identified hydroxylase and infrared microscope and infrared microscope) the support at the contract of the infanted of the contract and feed industry in the food and feed industry in the food and correlating (using a computer) identified to to a scanning captured and correlating (using a computer) identified to a scanning a computer in the contract of the correct and the contract of the contract and contract of the contract 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonucleotide sequences used in the exemplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            present invention describes a method (M1) for designing capture
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81.8%; Pred. No. 5.8e+02;
tive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                    Favis R, Kliman R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 24 BP; 4 A; 9 C; 6 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 5; Fig 25; 300pp; English
                                                                                                                                                                                                                                                                                                                                          Gerry NP,
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Gaps

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Human, K.ras, PCR primer; probe, capture probe, mutation detection; ligase detection reaction; LDR, p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor, human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.

Synthetic

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The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary coligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents of a salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents of Cryptococcus neoformans, Candida albicans and Aspergillus funigautus, viruses e.g. T-cell lymphocytotrophis cirus, Septembrar virus and polio virus, and parasitic infectious agents of Spstein Barr virus and polio virus, and parasitic infectious agents.

CC Aspergillus funigautus, virus, and parasitic infectious agents of selected from mochoverva volvulus, Entamoeba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such betecting cancer involving oncogenes, tumour suppressor genes.

CC Detecting cancer involving oncogenes, tumour suppressor genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning celectron microscope and infrared microscope) the support at the electron microscope and infrared microscope) the support at the parasitic parasitical and securred and correlating fusing a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABI97546 represent oligonucleotide sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                           Designing capture oligonucleotide probes for use on a support complementary oligonucleotides hybridize with little mismatch
                                                                                                                                                                                                                                                              Kliman R;
                                                                                                                                                                                                                                                              Favis R,
                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 3; Fig 26; 300pp; English.
                                                                                                                                                                                                                                                              Gerry NP,
                                                                                                                                                                                                        (CORR ) CORNELL RES FOUND INC
                                                                                                     04-APR-2001; 2001WO-US010958,
                                                                                                                                                     14-APR-2000; 2000US-0197271P.
                                                                                                                                                                                                                                                           Zirvi M,
                                                                                                                                                                                                                                                                                                              WPI; 2002-034366/04
  WO200179548-A2
                                                  25-OCT-2001
                                                                                                                                                                                                                                                           Barany F,
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a support to which

Gaps · 0 0.9%; Score 15.6; DB 1; Length 24; 11.8%; Pred. No. 5.8e+02; Ive 0; Mismatches 4; Indels Sequence 24 BP; 7 A; 8 C; 6 G; 3 T; 0 U; 0 Other; 81.8%; Local Similarity 81.8 ses 18; Conservative Query Match Best Loca Matches

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ABI92133 standard; DNA; 24 BP RESULT 272 AB192133 

(first entry) 15-FEB-2002 ABI92133;

Capture oligonucleotide Zip ID#235 oligo #4.

Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCAl; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrom; obssity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.

Synthetic.

Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonuclectide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonucleotide sequences used in the exemplification oligonucleotide probes (1) for use on a support to which complementary oligonucleotide probes (1) will hybridise with little mismatch, where (1) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus funigatus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamocba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch. Gaps 0; The present invention describes a method (M1) for designing Query Match 0.9%; Score 15.6; DB 1; Length 24; Best Local Similarity 81.8%; Pred. No. 5.8e+02; Matches 18; Conservative 0; Mismatches 4; Indels Kliman R; Sequence 24 BP; 3 A; 6 C; 8 G; 7 T; 0 U; 0 Other; Favis R, 1118 TCCTGCTTGGGTCCACGGACTA 1139 rcrrecrresrccarssaca 24 Claim 3; Fig 26; 300pp; English. Gerry NP, (CORR ) CORNELL RES FOUND INC 04-APR-2001; 2001WO-US010958. 14-APR-2000; 2000US-0197271P. of the present invention Barany F, Zirvi M, WPI; 2002-034366/04. WO200179548-A2 25-OCT-2001 ð g

ABI82866 standard; DNA; 24 BP ABI82866; RESULT 273 ABI82866, 

; 0

Capture oligonucleotide Zip ID#235 oligo #1. (first entry) 15-FEB-2002

Human, K-ras, PCR primer; probe, capture probe, mutation detection, ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome, obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.

Synthetic

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of the present invention
                 Barany F, Zirvi M,
                    WPI; 2002-034366/04
WO200179548-A2
                                                                                                         15-FEB-2002
   25-OCT-2001
                                                                                                                          Synthetic
                                                                                                     ABI84590;
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Sequence 24 BP; 5 A; 6 C; 9 G; 4 T; 0 U; 0 Other; 04-APR-2001; 2001WO-US010958. 14-APR-2000; 2000US-0197271P. WO200179548-A2 25-0CT-2001 The present invention describes a method (M1) for designing capture oligonucleotide probes (1) for use on a support to which complementary coligonucleotide probes (1) will hybridise with little mismatch, where coligonucleotide probes (11) will hybridise with little mismatch, where coligonucleotide probes (11) will hybridise with little mismatch, where the coligonucleotide is useful to detecting infectious diseases caused by bacterial infectious agents concerned in flow of the coligonucleotide alphanes, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and infectious agents of the method is useful for detecting infectious agents concerned from Onchoverva volvulus, Entamocba histolytica and Dracunculus and parasitic infectious agents can edinesis. The method is also useful for detecting genetic diseases such the method is not application, replication, recombination or repair, the cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCAH gene, concerned for also used for environmental monitoring, forensics and the food method is also used for environmental monitoring, forensics and the food can feet industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe researce of the target nucleotide sequences. AB197546 represent oligonucleotide sequences used in the exemplification Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch. Favis R, Kliman Example 5; Fig 25; 300pp; English Gerry NP, (CORR ) CORNELL RES FOUND INC 04-APR-2001; 2001WO-US010958. 14-APR-2000; 2000US-0197271P.

; 0 Gaps . , Query Match 0.9%; Score 15.6; DB 1; Length 24; Best Local Similarity 81.8%; Pred. No. 5.8e+02; Matches 18; Conservative 0; Mismatches 4; Indels Sequence 24 BP; 7 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

Human, K-ras, PCR primer; probe, capture probe, mutation detection; ligase detection reaction; LDR, p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss. Capture oligonucleotide Zip ID#1097 oligo #1. ABI84590 standard; DNA; 24 BP (first entry)

The present invention describes a method (M1) for designing capture oligonuclectide probes (I) for use on a support to which complementary oligonuclectide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoforamas, Candida albicans and Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents e.g. asletched from Onchoverva volvulus, Entamoeba histolyfica and Dracunculus captured from Onchoverva volvulus, Entamoeba histolyfica and Dracunculus as 1 hydroxylass deficiency, Turner Syndrome and obesity defects.

CC selected from Onchoverva volvulus, ecombination or repair, the as 21 hydroxylass deficiency, Turner Syndrome and obesity defects.

CC petecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the cc particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch. Kliman R; Favis R, Example 5; Fig 25; 300pp; English. Gerry NP, (CORR ) CORNELL RES FOUND INC the present invention WPI; 2002-034366/04 Barany F,

Gaps .; 0 0.9%; Score 15.6; DB 1; Length 24; 31.8%; Pred. No. 5.8e+02; Ive 0; Mismatches 4; Indels 1279 TGGCCAGGCATCCTGTCCAACG 1300 81.8%; Query Match 0.9 Best Local Similarity 81.8 Matches 18; Conservative ò

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22 TGCCGTGACATCCTGTCCAACG 1 ADL61761 standard; DNA; 24 BP. ADL61761; RESULT 275 ADL61761

chicken embryonic stem cell; B lymphocyte; polyclonal antibody; PCR; primer; ss; human; immunoglobulin heavy chain; VH4-4. PCR primer 1 used to amplify human Ig heavy chain VH4-4 region. 

20-MAY-2004 (first entry)

WO2003081993-A2 Homo sapiens.

09-OCT-2003.

Zhu

Leighton P,

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The invention relates to a novel composition comprising a sustained culture of chicken embryonic stem (ES) cells with a transgene stably integrated into the genome of substantially all of the progeny of the ES cells, which contribute to B lymphocytes of a chimeric chicken produced by the injection of the ES cell progeny into a chicken embryo. The composition of the invention may be useful for preparing human polyclonal antibodies for human therapy. The current sequence is that of the PCR primer 1 of the invention which was used to amplify human immunoglobulin heavy chain VH4-4 region.
                                                                                                                                        New composition comprising a sustained culture of chicken embryonic stem (ES) cells, useful for preparing human polyclonal antibodies for human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene expression; LY6G6C; LY6G6D; LY6G6E; LY6G5C;
                                                                                                                                                                                                                                                                                                                                                 Sequence 24 BP; 10 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mouse Ly6g6d cDNA analysing primer MG6DRT2.
                                                                                                                                                                                             Example 6; SEQ ID NO 17; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                 CCTGCTCAAGGACCTCAAACAC 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ccrecacadaacargaacac 22
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             24-MAR-2003; 2003WO-US009288.
                                     22-MAR-2002; 2002US-00104057.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-JUN-2002; 2002GB-00014524
                                                              (ORIG-) ORIGEN THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MEDI-) MEDICAL RES COUNCIL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADI03803 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LY6G5B; PCR; primer;
                                                                                        Etches RJ, Kay RM,
                                                                                                               WPI; 2003-812491/76.
                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              medicament;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2004001034-A2
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                                                                                                                                                                 therapy
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BP

New isolated nucleic acid molecule comprising a part of the sequence of intron 1 of a human LY-6 superfamily gene or of a homologous gene from an animal, useful for preparing a medicament to regulate gene expression in subjects.

WPI; 2004-099121/10.

Example 3; Page 38; 59pp; English

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Gaps

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0.9%; Score 15.6; DB 1; Length 24; 81.8%; Pred. No. 5.8e+02; ive 0; Mismatches 4; Indels

The invention relates to an isolated nucleic acid molecule comprising at least part of the sequence of intron 1 of a human LY-6 superfamily gene or of a homologous gene from an animal, or a corresponding sequence. The sequence comprises at least part of intron 1 of a gene selected from all LY-6 genes, CD59, uPAR, SP10, SLURP-I, E48, RIG-E, PSCA, ThB and TSA-LY-6xa2. The nucleic acid molecule is useful in preparing a medicament to regulate the expression of a gene in a subject. Sequences AD103768-AD103810 represent primers used in cDNA analysis of human and mouse MHC class III region LY-6 superfamily members (LX6G6C, LX6G6D, LX6G5C, LX6G5C) The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, neovascular glaucoma, myopic degeneration, arthritis, psoriasis, veruca vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme; useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome. Gaps Randi AM; Novel polynucleotide which down regulates expression of Ets-related useful for treating cancer, diabetic retinopathy, macular decemenati 0 Score 15.6; DB 1; Length 24; Pred. No. 5.8e+02; 0; Mismatches 4; Indels Jarvis T, Von Carlowitz I, Mcswiggen JA, Mclaughlin F, Human ERG Amberzyme target sequence Seq ID No 1904. Sequence 24 BP; 5 A; 6 C; 7 G; 6 T; 0 U; 0 Other; 1288 ATCCTGTCCAACGAGGTTCA 1309 23 ATCCCGACCAACTGGGAGTTCA 2 Claim 4; Page 124; 149pp; English BP. 0.9%; 16-MAY-2001; 2001WO-US015866. 16-MAY-2000; 2000US-00572021 Query Match

Query Match

Best Local Similarity 81.55,

"hes 18; Conservative ABK19257 standard; RNA; 17 (RIBO-) RIBOZYME PHARM INC. (GLAX ) GLAXO GROUP LTD. (first entry) WPI; 2002-082995/11 WO200188124-A2 Homo sapiens 09-APR-2002 and LY6G5B. 22-NOV-2001 ABK19257; amberzyme RESULT 277 ABK19257 \*\*\*\*\*\*\*\*\*\*\*\*\* ò g 

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syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies conditions suitable for the treatment. Leukaemia or tumour conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting (I) is useful for suseful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent cation such as Mg2+. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically cargeting genes that share honology with ERG gene or ERG fusion genes. ABK17354-ABK22719 represent nucleic acids, including antisense and enaymatic nucleic acid molecules which regulate expression of ERG, and crelated PCR primers of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
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0.9%; Score 15.4; DB 1; Length 17; 12.4%; Pred. No. 4.6e+02; ve 2; Mismatches 1; Indels
                                                                      1295 CCAACGAGGAGTTCAAG 1311
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                   Best Local Similarity 82.4%;
Matches 14; Conservative
                                                                                                      ccaacggggggucaag
        Query Match
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Gaps

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Human PAPP-Ea associated 17-mer SEQ ID 544.
     ABS75018 standard; DNA; 17
               (first entry)
              24-DEC-2002
         ABS75018;
RESULT 278
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BP.

PAPP-B; human; pregnancy associated plasma protein B; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.

Homo sapiens

US2002102252-A1.

01-AUG-2002.

06-APR-2001; 2001US-00827998.

26-MAY-2000; 2000US-0207456P.

GU Y. SHANNON M E. (duxx/) SHAN/)

Shannon ME; Gu Y,

WPI; 2002-697817/75.

New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy

Example 2; Page 146; 353pp; English

This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hPAPP-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of

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The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated I (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive bulmonary disease (COPD), chronic bronchisis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to
                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.
                                                                                                                                                                                                              Gaps
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                                                                                                                                                                      Length 17;
                                                                                                                                                                                                              1; Indels
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                                                                                                                                    Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                      Score 15.4; DB 1;
Pred. No. 4.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human CLCA1 gene enzymatic nucleic acid #1499.
                                                                                                                                                                                                                0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 4; Page 96; 152pp; English.
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                                                                                                                                                                            0.9%;
                                                                                                                                                                                                                                                      287 AACTICGTICIGCACGG
                                                                                                                                                                                                                                                                                         1 AACTICGITCTGCAAGG
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                                                                                                                                                                                                                                                                                                                                                                                        ABK57128 standard; RNA; 17
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                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                                          Local Similarity
les 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200211674-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       acetylcysteine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-JUL-2002
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Query Match 0.9%; Score 15.4; DB 1; Length 17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New nucleic acid molecule that modulates replication of West Nile Virus
examine genetic drift and mutations within diseased cells or to detect
the presence of CLCA1 RNA in a cell. This sequence represents an
enzymatic nucleic acid molecule of the invention
                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis; liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
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0
                                                                                                           0.9%; Score 15.4; DB 1; Length 17; 70.6%; Pred. No. 4.6e+02; Live 4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                 WNV minus strand Inozyme substrate SEQ ID NO 10396.
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                                                                      Sequence 17 BP; 4 A; 5 C; 4 G; 0 T; 4 U; 0 Other;
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                                                                                                                                                                                     1573 TCAGGCAGGCCAGCTTT 1589
                                                                                                                                                                                                             CAAGCAGGCCAGCUUU 17
                                                                                                                                                                                                                                                                                                                        BP.
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                                                                                                                                                                                                                                                                                                                      ACN10393 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RIBOZYME PHARM INC
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                                                                                                                            12; Conservative
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(MCSW/) MCSWIGGEN J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-706994/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      West Nile Virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200268637-A2.
                                                                                                                                                                                                                                                                                                                                                                                            22-APR-2004
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                                                                                                                                                                                                                                                                                                                                                         ACN10393;
                                                                                                             Query Match
                                                                                                                                Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, wrotarditis, meningits, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of mammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least three of the 5' terminal nuclectides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID No 194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to nucleic acid molecules that modulate replication
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
                     Gaps
                                                                                                                                                                                                                                                                                                     WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis; liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
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14.1%; Pred. No. 4.6e+02;
ve 0; Mismatches 1; Indels
                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 0 A; 1 C; 10 G; 0 T; 6 U; 0 Other;
 Pred. No. 4.6e+02;
); Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 23; SEQ ID NO 6747; 495pp; English.
                                                                                                                                                                                                                                                                      WNV Amberzyme substrate SEQ ID NO 6747.
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                                                    445
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                                                                                                                                                                     ACN06744 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-OCT-2001; 2001WO-US048350.
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                                                                                1 CAACCAACCCCCACGCA
                                                   429 CAACCATCCCCCACGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                      22-APR-2004 (first entry)
Best Local Similarity 94.1
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                          Amberzyme; Zinzyme; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-706994/76.
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                                                                                                                                                                                                                                                                                                                                                                                                          West Nile Virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200268637-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-SEP-2002
                                                                                                                                                                                                      ACN06744;
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                                                                                                                                   RESULT 281
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Su MS;

Lalanne J, Livingston DJ,

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The present sequence is that of a PCR primer used for isolating the 3'-end of a cDNA sequence coding for the human protease designated Ty which is related to the interleukin-1 beta converting enzyme (ICE) and which induces apoptosis. The Ty protein has over 70% homology to Tx which converts the p30 precursor of ICE into 20 kD and 10 kD fragments and can be used for treating diseases which respond to ICE, e.g. inflammation. The ability to induce apoptosis will be useful for treating cancer
                                                                                                                                                                                                                                                                   New DNA encoding human protease(s) that induce apoptosis - and cause maturation of interleukin converting enzyme, useful e.g. in treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 15.4; DB 1;
Pred. No. 5.1e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                              Example 3; Page 26; 88pp; French.
                                                                                                                                                                                                         Hercend T,
                                                                                                                     95WO-FR001035.
                                                                                                                                                 94FR-00009567.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.9%;
Best Local Similarity 94.1%;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1436 AGGATGCCATGAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18 AGGATGCCATGAGACAT
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amplification primer; ss.
                                                                                                                                                                              (ROUS ) ROUSSEL-UCLAF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-412314/35
                                                                                                                                                                                                                                                                                                autoimmune diseases
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                                                                                                                                                                                                          Faucheu C,
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                                                           WO9604387-A1
                                                                                                                      01-AUG-1995;
                                                                                                                                                  02-AUG-1994;
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                                                                                        15-FEB-1996
                             Synthetic.
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                                                                                                                                                                                                            Diu A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to murine oligonucleotides (ALCo2/27-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, duantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, are characterised by development of tumours or cell degeneration,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Interleukin-1 beta converting enzyme; ICB; protease; apoptosis; induction; inflammation; autoimmune disease; neurodegeneration; cancer; infection; treatment; Ty protein; polymerase chain reaction;
                                                                                                                                                               Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                    Murine oligonucleotide associated with tumour supression, SEQ ID 3103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             specifically cancer but also Alzheimer's disease and schizophrenia
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94.1%; Pred. No. 4.6e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 6 A; 1 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human Ty protease cDNA PCR primer Ty 3.2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 393; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                          Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    127 GATCGGATGAAGAAGAT 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВР
                                                                                                                                                                                                                                                                                                                                                                                              (MOLE-) MOLECULAR ENGINES LAB
                                              ACC65856 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                    17-SEP-2002; 2002WO-IB004210
                                                                                                                                                                                                                                                                                                                                                               17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT12600 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                            Telerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-333167/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                               schizophrenia; ss
                                                                                                                                                                                                                                                                         WO2003025176-A2
                                                                                                           01-JUL-2003
                                                                                                                                                                                                                                             musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-DEC-1996
                                                                                                                                                                                                                                                                                                     27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT12600;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                              ACC65856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT12600/c
ID AAT112
XX
AC AAT12
XX
DT 31-DB
DT 31-DB
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                                   ACC65856
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Gaps

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Length 19 1; Indels

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Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Robbins JM;
1452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Barber JR,
                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                          cdk3 ribozyme binding site #7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-US028772
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PCNA and Cyclin Bl.

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Gaps

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719

BP

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Human, ribozyme therapy, hairpin ribozyme, hammerhead ribozyme; recognition site; target, ribozyme binding site; eye disease; vulnerary, proliferative disease; skin disease, psoriasis, diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic, antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; basal cell carcinoma; seborrheic squamous cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                     The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and CYclin BI.
Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme [1] which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteniase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:308.
                                                                                                                                                                                                                                                                                       0.9%; Score 15.4; DB 1; Length 19; ilarity 94.1%; Pred. No. 5.1e+02; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                   Sequence 19 BP; 8 A; 2 C; 6 G; 3 T; 0 U; 0 Other;
                                   Disclosure; Page 50; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 94; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                         2 AAGAAGATCAGACTGGA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-OCT-2000; 2000WO-US029500.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-0161532P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                     703 AAGGAGATCAGACTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAH57884 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-300427/31.
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                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200130362-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-OCT-1999;
                                                                                                                                                                                                                                                                                                                           16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Robbins JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-MAY-2001
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                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                               Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 285
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nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, dernatological, vyfostatic, antiseborrheic, antidabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin glusances such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scarr, its and contracting and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scarr, AHBTSTYT to AAHGSDER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorectic; antidabetic; antiinflammatory; antiasthmatic; immunosuppressive; antibacterial; antiheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; rheumatoid arthritis; psoriatis; inflammatory bowel disease; drug screening;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mitogen activated protein kinase sinA oligonucleotide SEQ ID NO:205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated protein kinase genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.9%; Score 15.4; DB 1; Length 19; 94.1%; Pred. No. 5.18+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chowrira
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           genetic engineering; pharmacogenomic; gene mapping; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Haeberli P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 8 A; 2 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 3; SEQ ID NO 205; 164pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       719
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20020S-0363124P
2002US-0366782P
2002US-0406784P
2002US-0408378P
2002US-0409239P
2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 AAGAAGATCAGACTGGA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-JAN-2003; 2003WO-US002510.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADE29583 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 94.1
les 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-689980/65.
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11-MAR-2002;
06-JUN-2002;
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15-JAN-2003;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADE29583;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         fatches
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that downregulates expression of a mitogen-activated protein kinase (MAPK) genes by RNA interference. Also described: (1) a method for modulating expression of MAPK genes in cells, tissue explants or organisms by introduction of SINA; (2) kits for in virto or in vivo delivery of SINA; (3) conjugates and/or complexes of SINA; and (4) vectors that express sinA and cells containing these vectors. MAPK sinAs have cytostatic, anortal antidiabetic, antihilamentory, antiarthritic, antipsoriatic and gastrointestinal activities. The MAPK sinAs can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity; diabetes types I cand II; a wide range of tumours, and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel candisease). They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; cutdying gene function and gene mapping (e.g. of single-nucleotide colly becaute the advance the supersents a MAPK sinA which is used in the advance the supersents a mapk sinA which is used
present invention describes a short interfering nucleic acid (siNA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     in the exemplification of the present invention.
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Sequence 19 BP; 7 A; 6 C; 6 G; 0 T; 0 U; 0 Other;

Score 15.4; DB 1; Length 19; Pred. No. 5.1e+02; 0; Mismatches 1; Indels 1035 CTTTGGCCTGGCCCGAG 1051 19 cririgaccradaccara 3 0.9%; Query Match 0.9 Best Local Similarity 94.1 Matches 16; Conservative ð

0

Gaps

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ADE29420 standard; RNA; 19 BP. ADE29420; RESULT 287 ADE29420 

29-JAN-2004 (first entry)

Mitogen activated protein kinase sinA oligonucleotide SEQ ID NO:42.

short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorecitic; antidiabetic; antiinflammatory; antiasthmatic; immunosuppressive; antibacterial; antitheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma, septic shock; rheumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss.

Synthetic.

WO2003072590-A1.

04-SEP-2003

28-JAN-2003; 2003WO-US002510

2002US-0358580P. 20-FEB-2002;

2002US-0363124P. 2002US-0386782P. 2002US-0406784P. 2002US-0408378P. 2002US-0409293P. L5-JAN-2003; 2003US-0440129P 11-MAR-2002; 06-JUN-2002; 29-AUG-2002; 05-SEP-2002; 09-SEP-2002;

(SIRN-) SIRNA THERAPEUTICS INC

Chowrira B; Usman N, Haeberli P, Beigelman L, Mcswiggen J,

WPI; 2003-689980/65.

New short interfering nucleic acid, useful e.g. for treatment and

Chowrira B;

Mcswiggen J, Beigelman L,

The present invention describes a short interfering nucleic acid (siNA) that downregulates expression of a mitogen-activated protein kinase that downregulates expression of a mitogen-activated protein kinase codulating expression of MAPK genes in cells, tissue explants or corganisms by introduction of siNA; (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA; and (4) express siNA and cells containing these vectors. MAPK siNAs correspond that express siNA and cells containing these vectors. MAPK siNAs care cytostatic, ancretic, antibacterial, antirheumatic, antisathmatic, antispondatic and gastrointestinal activities. The MAPK siNAs can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity; diabetes types I compliate angle of tumours, and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel condentification and validation; genetic engineering; pharmacogenomics; cidentification and validation; genetic engineering; pharmacogenomics; cudying gene function and gene mapping (e.g. of single-nucleotide collaboration). The present invention. ö Gaps short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ERG2; v-ets erythroblastosis virus E26 oncogene like (avian). downregulates expression of mitogen-activated .. Score 15.4; DB 1; Length 19; Pred. No. 5.1e+02; 1; Indels Sequence 19 BP; 0 A; 6 C; 6 G; 0 T; 7 U; 0 Other; 4; Mismatches Human ERG2-targeted siRNA - SEQ ID 1304. Example 3; SEQ ID NO 42; 164pp; English 1035 CTTTGGCCTGGCCCGAG 1051 2002US-0363124P. 2002US-0386782P. 2002US-0404039P. 2002US-0406784P. 1 curudeccuedecceud 17 BP 0.9%; 20-FEB-2003; 2003WO-US005234. 2002US-0408378P 2002US-0409293P. 2003US-0440129P ADF85010 standard; RNA; 19 (RIBO-) RIBOZYME PHARM INC 26-FEB-2004 (first entry) Query Match 0.9 Best Local Similarity 70.6 Matches 12; Conservative protein kinase genes. WO2003070972-A2 05-SEP-2002; 09-SEP-2002; 14-JAN-2003; Homo sapiens 20-FEB-2002; 11-MAR-2002; 06-JUN-2002; 15-AUG-2002; 29-AUG-2002; 15-JAN-2003; 28-AUG-2003 ADF85010; RESULT 288 ADF85010 ठ

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The invention relates to a novel double-stranded short interfering mucleic acid (siNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, the human ERG2 (v-ets erythroblastosis virus E26 oncogene like (avian))-targeted siRNA of the invention.
                           New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ERG2; v-ets erythroblastosis virus E26 oncogene like (avian).
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                                                                                         Example 7; SEQ ID NO 1304; 197pp; English.
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2002US-0386782P.
2002US-0404039P.
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2002US-0408378P.
2002US-0409293P.
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WPI; 2003-679889/64
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05-SEP-2002;
09-SEP-2002;
14-JAN-2003;
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15-AUG-2002;
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                                             nucleic acid (siNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siNRA of the invention demonstrates expression activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of the human ERGZ (v-ets erychroblastosis virus E26 oncogene like (avian))-targeted siRNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cytostatic; vasotropic; nephrotropic; cerebroprotective; treating leukaemia; solid tumors; restenosis; polycystic kidney disease; bronchiolitis; glomerulonephritis; stroke; RNA interference; short interfering nucleic acid; siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene empping; human; platelet derived growth factor receptor; PDGFr; ss.
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                                  The invention relates to a novel double-stranded short interfering
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Example 7; SEQ ID NO 1480; 197pp; English.
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11-MAR-2002; 2002US-0363124P.
06-JUN-2002; 2002US-0386782P.
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05-SEP-2002;
09-SEP-2002;
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Gaps

The invention relates to short interfering nucleic acids (siNA) which

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downregulate expression of the human platelet-derived growth factor receptor (PDGFr) gene by RNA interference. The sinAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the sinAs include short interfering RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain (expressed from a cector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siRNA; conjugates and/or complexes of siRNA; and vectors that express siNA. The siNAs are used to modulate expression of the PDGFr gene in cells, tissue explants or coganisms (e.g., by ex vivo gene therapy), or in grafts and transplants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants or creating leukaemia and solid tumours, restenosis, polycystic (sidney disease, bronchiolitis, glomerulomephritis and stroke. The siMNa are also useful for drug screening, diagnosis, therapeutic target identification or disease, bronchiolitis, glomerulomephritis and stroke. The siMNa are also thuction, and gene mapping (e.g., of single nucleotide polymorphisms).

The present sequence represents the lower strand of a human PDGFr transcript
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06-UUN-2002; 2002US-0386782P.
29-AUG-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-0409293P.
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deoxyribonuclectides, and can be chemically synthesised, expressed from a decon be unmodalized, can coulcain the invention also relates to kits vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siRNA, conjugates and/or complexes of siRNA, and vectors that express siNA. The siNAs are used to modulate expression of the PDGFr gene in cells, tissue explants or congranisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for treating leukaemia and solid tumours, restenosis, polycystic kidney issease, bronchiolitis, glomerulomephritis and stroke. The sinks are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene unapping (e.g., of single nucleotide polymorphisms). The present sequence represents the upper strand of a human PDGFr-targeted double-stranded siNA, which is identical to the PDGFr transcript
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                                                                                                                                                                                                                                                                                                                                                           The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human platelet-derived growth factor receptor (POGFT) gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNas can be unmodified or chemically modified, can contain
                                                                                                                                           New short interfering nucleic acid, useful e.g. for treatment and diagnosis of tumors, downregulates expression of the platelet-derived
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   Chowrira B;
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98IL-00126627.
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es 11; Conservative
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Mcswiggen J, Beigelman L,
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(GENE-) GENENA LTD

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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell the pattern of expression of genes in a selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is cransformed. They can be used for detecting a selected genetic defect in an individual, e.g. a fetus. They can also be used for determining the chtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected gene family. Sequences AAZ17803-Z18342 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, protein phosphatase genes, P450 enzyme genes, steroid receptor
                                                                                                                                                                    Identifying and characterizing cells by comparing the pattern of gene expression in a selected gene family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                superfamily genes or cadherin superfamily genes
                                                                                                                                                                                                                                               Claim 4; Page 48; 102pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1024 AAGCTGGCTGACTTTGG 1040
                                                                                               WPI; 1999-419113/35
                                                                                                                        P-PSDB; AAY14748
                                              Vider B;
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Gaps 0 0.9%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 5.3e+02; ive 0; Mismatches 1; Indels Sequence 20 BP; 3 A; 2 C; 7 G; 8 T; 0 U; 0 Other; Query Match
Best Local Similarity 94.1;

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ACF03629 standard; DNA; 20 BP 1 AAGGTGGCTGACTTTGG RESULT 293 ACF03629/c

(first entry) 15-SEP-2003 ACF03629; 

Human NOV4b reverse PCR primer SEQ ID NO:199.

Human; NOVX; cytostatic; cardiant; antiinflammatory; immunosuppressive; antiallergic; haemostatic; anti-HIV; antidiabetic; antiarteriosclerotic; anorectic; antiaschmatic; nephrotropic; antiarthritic; hepatotropic; neuroprotective, notropojc; antiarthritic; hepatotropic; relaxant; anticorvolsant; hypotensive; vasotropic; antiparasitic; relaxant; anticorvolsant; hypotensive; vasotropic; antiparkinsonian; vulnerary; angiogenic; antiangiogenic; gene therapy; vaccine; cancer; cardiomyopathy; atherosclerosis; hypertension; diabetes; inflammation; autoimmuno disorder; allergy; blood disorder; AIDS; obesity; asthma; acquired immunodeficiency syndrome; nephropathy; cirrhosis; arthritis; Alzheimer's disease; Parkinson's disease; goitre; infection; stroke; muscular dystrophy; epilepsy; wasting disorder; PCR primer; ss.

sapiens Synthetic.

28-NOV-2002

40200294870-A2

phosphorothioate backbone; antisense; ss

Homo sapiens

02-NOV-2001; 2001WO-US051580.

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ACT ACF03547 to ACF03570 encode the human NOVX proteins (I) given in ABR57412 to ACF03540. (I) have cytostatic, cardiant, antiniflammatory, nootropic, to ABR57435. (I) have cytostatic, cardiant, antiniflammatory, nootropic, cardiantsurpressive, antiallergic, haemostatic, nephrotropic, virucide, antiarthritic, hepatotropic, neuroprotective, antibacterial, relaxant, antiparssitic, anticonvulsant, hypotensive, vasotropic, antiparkinsonian, vulnerary, angiogenic and intiangiogenic activities, and can be used in gene therapy and vaccines. The NOVX polypeptides and their antibodies can be used to determine the presence or absence of (I) in a sample. The NOVX pelypeptides and their antibodies against them, are useful in manufacturing a medicament for treating or preventing a cylphopitide, polypeptides, polymorleotides encoding them, and antibodies against them, are useful in manufacturing a medicament for treating or preventing a cardiomyopathy, atherosclerosis, cancer, diabetes, asthma, inflammation, autoimmune disorders, allergies, blood disorders, obesity, acquired immunodeficiency syndrome (AIDS), immunoglobulin (Ig)A nephropathy, cirrhosis, arthritis, Alzheimer's disease, Parkinson's disease, goitre, diseases, antiections (e.g. badcterial, viral, parasitic), stroke, muscular (dystrophy, epilepsy, epilepsy, esquired disorders associated with chronic diseases. Acf001571 to ACF001541 represent PCR primers and probes for NOVX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              disorders, e.g. cancer, cardiomyopathy, atherosclerosis or diabetes, and
in chromosome mapping, tissue typing or pharmacogenomics.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New NOVX polypeptide useful for preventing or treating NOVX-associated
                                                                                                                                                                                                                                                                        Grosse WM, Macdougall JR, Smithson G, Millet I, Stone DJ;
Gunther E, Ellerman K, Alsobrook JP, Lepley DM, Burgess CE;
Spytek KA, Edinger SR, Gangolli EA, Gorman L, Taupier RJ, Li,
Guo X, Fernandes ER, Vernet CAM, Tchernev VT, Casman SJ, Shenoy:
Mishra V, Furtak K, Baumgartner JC, Colman SD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 293; 346pp; English.
                                          02-NOV-2000; 2000US-0245317P.
07-NOV-2000; 2000US-0246562P.
08-NOV-2000; 2000US-0246871P.
26-JAN-2001; 2001US-0264389P.
26-JAN-2001; 2001US-0264439P.
                     2000US-0245291P
                                                                                                                                                                                                                             (CURA-) CURAGEN CORP
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ABC transporter; ABCT; major histocompatibility complex; MHC; cytostatic; hyperproliferative; autoimmune disorder; antisense gene therapy; inflammation; tumour formation; immunosuppressive; antimicrobial; human; Gaps Human ABC transporter MHC I antisense oligonucleotide, ISIS 206615. ó, 0.9%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 5.3e+02; ve 0; Mismatches 1; Indels 1240 TICALCITCCGIAICT 1256 AAL62434 standard; DNA; 20 BP 94.18; 18 ricarcircecarerr 06-OCT-2003 (first entry) Query Match 0.9 Best Local Similarity 94.1 Matches 16; Conservative AAL62434; RESULT 294 AAL62434/c ð 

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Human MOL protein related PCR primer Seq ID198.

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                                                                                                                                                                                                                                                                                                                                                       New antisense compound that hybridizes and inhibits the nucleic acid encoding ABC transporter major histocompatibility complex 1, for treating diseases or conditions such as a hyperproliferative or autoimmune
                                                      /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
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14.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                          /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                /note= "2'methoxyethyl nucleotides'
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                      Location/Qualifiers
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                                                                                                                                                                                                                                                             17-DEC-2001; 2001US-00024369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94.18;
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Best Local Similarity 94.1
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention relates to novel human nucleic acid sequences which encode novel molecule (MOL) proteins numbered MOL1-23, referred to generally in the specification as MOLX. Compounds which modulate the function of the MOLX proteins of the invention, MOLX agonists or antagonists, may have cardiant, antidiabetic or antiarteriosclerotic activities. In addition,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fernandes ER, Vernet CAM, Shimkets RA, Anderson DW, Padigaru M;
Boldog FL, Li L, Shenoy SG, Casman SJ, Rastelli L, Alsobrook JP;
Burgess CE, Grosse WM, Gusev VY, Ji W, Lepley DM, Liu X, Mezick AJ;
Patturajan M, Shen L, Spaderna SK, Spytek RA, Szekeres ES;
Taupier RO, Tohernev VT, Zerhusen BD, Voss EZ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New MOLX polypeptide, nucleic acid or MOLX-specific antibody, useful preparing a composition for treating or preventing a MOLX-associated disorder, e.g., cardiomyopathy, diabetes or atherosclerosis.
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                          cardiant; antidiabetic; antiarteriosclerotic; gene therapy; MOLX-associated disorder; cardiomyopathy; diabetes; atherosclerosis;
molecule protein; MOL protein; MOLX; MOLX agonist; MOLX antagonist;
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34.1%; Pred. No. 5.3e+02;
ive 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                         05-JUL-2011, 2001US-0303241P.
26-SEP-2001, 2001US-0303241P.
26-SEP-2001, 2001US-00966545.
26-SEP-2001, 2001US-00966546.
01-APR-2002, 2002US-036996P.
01-APR-2002, 2002US-036996P.
01-APR-2002, 2002US-034937P.
07-JUN-2002, 2002US-038437P.
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                                                                                             human; PCR; primer; ss
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es 16; Conserv
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADD56709
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The present invention relates to a method for the direct comparison of numerical gene expression values between samples of genes. The method comprises amplifying cond.

The presence of a competitive template environmental genes and then amplifying aliquots of the PCR products using a primer pair specific for each gene. The method of amplification is by multiplex standardised reverse transcriptase-polymerase chain reaction (Starr-PCR). High density oligonucleotide or cDNA arrays are used to measure PCR products following quantitative Starr-PCR. The method is useful for the assessment of gene expression in small biological samples such as fine needle aspirate biopsies, and laser captured microdissected materials. The method allows for the standardised measurement of hundreds of genes from the same sample, which in prior art, could only be assessed for one gene. The present sequence represents a multiplex Starr-PCR primer which can be used in the method of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct comparison of numerical gene expression values between samples of genes comprises using multiplex standardized reverse transcription-polymerase chain reaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         proliferation; cancer; cancer cell growth inhibition; human; PCR primer;
                                                  Gene expression; multiplex standardised reverse transcriptase-PCR; StaRT-PCR; high density oligonucleotide array; cDNA array; small biological sample; fine needle aspirate biopsy; laser captured microdissected material; human; primer; ss.
               Human gene expression analysis multiplex StaRT-PCR primer #229.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.9%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 5.3e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 0 A; 10 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; SEQ ID NO 229; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human p21 gene PCR primer SEQ ID NO:46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            825 GICCCICACCCIIGICI 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADF72079 standard; DNA; 20 BP
                                                                                                                                                                                                                                                         28-MAR-2002; 2002US-00109349.
                                                                                                                                                                                                                                                                                            28-MAR-2002; 2002US-00109349.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GICCCICCCCCTIGICI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                       Willey JC, Crawford EL;
                                                                                                                                                                                                                                                                                                                             (WILL/) WILLEY J C. (CRAW/) CRAWFORD E L.
                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-811730/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                  US2003186246-A1
                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-FEB-2004
                                                                                                                                                                                                                      02-OCT-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADF72079;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 297
ADF72079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loca
Matches
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The present invention describes a method for determining whether an agent can be used to reduce the proliferation and/or cause the death of cancer cells or inhibit the growth of a cancer cell population. The method is useful in determining whether an agent can be used to reduce the proliferation and/or cause the death of cancer cells or inhibit the growth of a cancer cell population. The present sequence represents a PCR primer which is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NOVX; antidiabetic; anorectic; cardiant; hypotensive; antidiabetic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; osteopathic; antiarthritic; antiinflammatcory; dermatological; antiasthmatic; antilipaemic; metabolic; diabetes; obesity; infection; anorexia; cancer; cardiovascular; hyportension; atheroscierosis; neurodegenerative; Alzheimer's disease; Parkinson's; epilepsy; immune; osteoarthritis; haemopoietic; inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis; cell differentiation; proliferation; haemopoiesis; wound healing; angiogenesis; gene therapy; chromosome mapping; tissue typing;
                                                                                                                                                                                                                                                                                                     Determining whether an agent can be used to reduce the proliferation, cause the death or inhibit the growth of cancer cell population by obtaining a sample of cancer cells and quantifying the level of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Forward PCR primer Ag2822 used to analyse human NOV expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15.4; DB 1; Length 20;
4.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                 Demuth JP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 0 A; 10 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                               Graves TG,
                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; SEQ ID NO 46; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    pharmacogenomic; human; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                            expression of a marker in the cells.
                                                                                                                                                                                                              Warner KA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 825 GICCCICACCCITGICT 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADH17728 standard; DNA; 20 BP
                                                                                       27-MAR-2003; 2003WO-US009428.
                                                                                                                        28-MAR-2002; 2002US-0368288P.
28-MAR-2002; 2002US-0368409P.
                                                                                                                                                                            (MEDI -) MEDICAL COLLEGE OHIO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-MAY-2003; 2003WO-US013690,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4 Grecerececrierer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-MAR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.9 Best Local Similarity 94.1 Matches 16; Conservative
                                                                                                                                                                                                               Weaver DA,
                                                                                                                                                                                                                                                                   WPI; 2003-902899/82
                WO2003082078-A2
                                                                                                                                                                                                                              Crawford EL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                     09-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-NOV-2003
                                                                                                                                                                                                              Willey JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADH17728;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 298
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Gaps

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Homo sapiens

Synthetic.

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Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
                                                                           07-OCT-2002; 2002US-0416661P.
                                                                                     01-MAY-2003; 2003US-00428275
                                                                                             (CURA-) CURAGEN CORP.
                      30-MAY-2002;
30-MAY-2002;
30-MAY-2002;
30-MAY-2002;
                                     31-MAY-2002;
02-JUL-2002;
09-AUG-2002;
                                                09-AUG-2002;
                                                                       30-SEP-2002;
                                                           22-AUG-2002;
                                                               27-AUG-2002;
                   30-MAY-2002;
                                                        09-AUG-2002;
              29-MAY-2002;
                                                                   23-SEP-2
                                                                               24-OCT-2
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The invention relates to a move isolated work purpopulation.

Condiant, hypotensive, antiarteriosclerotic, anorectic, virucide, antibacterial, functione, protozoacide, nootropic, neuroprotective, antiparkinsonian, anticomyulsant, osteopathic, antiarthritic, antinflammatory, dermatological, antiasthmatic and antilipaemic activities. The polypeptides, nucleic acid molecules and antibodies may be useful in the manufacture of a medicament for treating metabolic disorders, diabetes, obesity, infectious diseases (viral, bacterial, fungal, helmithic, and protozoal), anorexia, cancer, cardiovascular diseases including hypertension and atherosclerosis, neurodegenerative disorders, althemer's disease, parkinson's disease, epilepsy, immune disorders, asthma and various types of dyslipidaemia. The nucleic acids and polypeptides may also be used as targets for the identification of small molecules that modulate or inhibit neurogenesis, call dentification of small molecules that modulate or inhibit neurogenesis, ound healing and angiogenesis, in gene therapy and the in generation of antibodies that bind immunospecifically to NOVX substances for use in therapeutic or diagnostic methods. The nucleic acids may be further used as a protosic protosic in chromosome mapping, tissue typing, preventive medicine and pharmacogenomics. The current sequence is that of the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        medicine and pharmacogenomics. The current sequence is that of the hu
NOVX-related PCR primer which was used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated NOVX polypeptide, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
Alvarez E, Anderson DW, Boldog FL, Catterton E, Edinger SR; Fernandes ER, Gerlach VL, Gorman L, Grosse WM, Guo X, Ji W; Kekuda R. Li L, Macdougall JR, Padigaru M, Patturajan M; Peterson JD, Rastelli L, Shimkets RA, Spytek KA, Stone DJ; Vernet CAM, Voss EZ, Zhong M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a novel isolated NOVX polypeptide. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example C; SEQ ID NO 418; 478pp; English.
                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-053040/05.
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New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding beta-site APP-cleaving enzyme 2 useful for treating a disease or condition, e.g. cancer, Alzheimer's disease or

neurodegenerative disease.

"cdd base= OTHER /mod base= This oligonucleotide has a phosphorothioate /note= "This oligonucleotide has a phosphorothioate backbone and 2'-methyoxyethyl (2'-MoB) wings at the 5' and 3' ends, which are 5 nucleotides in length at each end. All cytidine residues are 5-methylcytidines"

04-JUN-2002; 2002US-00163272. 04-JUN-2002; 2002US-00163272.

US2003224517-A1.

04-DEC-2003.

(ISIS-) ISIS PHARM INC

WPI; 2004-022081/02.

Dobie KW;

Human beta-site APP-cleaving enzyme 2, antisense oligonucleotide #10.

(first entry)

25-MAR-2004

ADH45076;

2002US-0384044P. 2002US-0384215P. 2002US-0384296P. 2002US-0384297P. 2002US-0384327P.

2002US-0385211P. 2002US-0393333P. 2002US-0402154P. 2002US-0402171P. 2002US-0402204P. 2002US-0402205P. 2002US-0405175P. 2002US-0406129P.

BP

ADH45076 standard; DNA; 20

RESULT 299 ADH45076,

20 AAGCAGGACCTGGATGA 4

셤

Antisense therapy, human; beta-site APP-cleaving enzyme 2; hyperproliferative disorder; cancer; neurodegenerative disorder; Alzheimer's disease; cytostatic; neuroprotective; nootropic;

phosphorothioate; ss.

Homo sapiens

2002US-0412954P. 2002US-0414975P.

2002US-0420851P

Location/Qualifiers

′\*tag= a

modified base

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The present invention relates to antisense compounds targeted to a nucleic acid encoding beta-site APP-cleaving enzyme 2. The antisense compound comprises an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits the expression of beta-site APP-cleaving enzyme 2. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense oligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-comprises at least one modified nucleobase, preferably a 5'-0-comprises such as hyperproliferative disorders, e.g. cancer, and neurodegenerative disorders such as Alzheimer's disease. The present sequence represents an antisense oligonucleotide used in the examples of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 15; SEQ ID NO 20; 59pp; English
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Gaps

. 0

0.9%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 5.3e+02; tive 0; Mismatches 1; Indels

16; Conservative

Matches

Query Match Best Local Similarity

ADI28116;

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New compounds, particularly antisense oligonucleotides targeted to a mucleic acid encoding beta-site APP-cleaving enzyme 2 useful for treating a disease or condition, e.g. cancer, Alzheimer's disease or neurodegenerative disease.
                                                                                                                                                       Antisense therapy; human; beta-site APP-cleaving enzyme 2; hyperproliferative disorder; cancer; neurodegenerative disorder; Alzheimer's disease; cytostatic; neuroprotective; nootropic; ds.
                                                                                                                                    Human beta-site APP-cleaving enzyme 2 DNA target sequence #9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 97; 59pp; English.
510 CTACCTGGAGAAGCTGA 526
                                                                       ADH45153 standard; DNA; 20 BP
                  7
                                                                                                                                                                                                                                                                 04-JUN-2002; 2002US-00163272.
                                                                                                                                                                                                                                                                                     04-JUN-2002; 2002US-00163272
            CTACCTGGAGATGCTGA
                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-022081/02.
                                                                                                                                                                                                                       US2003224517-A1
                                                                                                                                                                                                   Homo sapiens
                                                                                                                25-MAR-2004
                                                                                                                                                                                                                                            04-DEC-2003.
                                                                                            ADH45153;
                                                                                                                                                                                                                                                                                                                               Dobie KW;
                                                 RESULT 300
                                                             ADH45153
                                                                               à
                 d
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The present invention relates to antisense compounds targeted to a nucleic acid encoding beta-site APP-cleaving enzyme 2. The antisense compound comprises an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits the expression of beta-site APP-cleaving enzyme 2. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense oligonucleotide comprises at least one modified comprises at least one modified sugar moiety, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2.-O. Comprises at least one modified nucleobase, preferably a 2.-O. Comprises at least one modified nucleobase, preferably a 5.-O. Comprises at least one modified nucleobase, preferably a 5.-O. Comprises at least one modified sugar moiety. The antisense oligonucleotides are useful for the methylcytosine. The antisense oligonucleotides are useful for the creatment of diseases such as hyperproliferative disorders, e.g. cancer, and neurodegenerative disorders such as Alzheimer's disease. The present sequence for an antisense oligonucleotide.

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                                    Gaps
                                   ..
0
0.9%; Score 15.4; DB 1; Length 20;
14.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                               510 CTACCTGGAGAAGCTGA 526
                94.18;
             Best Local Similarity 94.1
Matches 16; Conservative
Query Match
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ADI28116/c
ID ADI28116 standard; DNA; 20 BP.
XX
         13
CTACCTGGAGATGCTGA
                                     RESULT 301
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The invention relates to a compound comprising a sequence comprising 8-80 base pairs (bp) targeted to a nucleic acid encoding protein tyrosine phosphatase type 1VA member 3 (PRL-3), that specifically hybridises with the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is an antisense oligonucleotide (AO). Also included are a composition comprising the compound and a carrier or diluent, inhibiting the expression of PRL-3 in cells or tissues, treating an animal having or suspected of having a disease or condition associated with PRL-3 and screening for an antisense compound. The antisense oligonucleotide is useful for preparing a composition for treating hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotide, comprising a sequence targeted to a nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL -3), useful for preparing a composition for treating hyperproliferative disorders, e.g., cancer.
                                                                                                                                                                                                                                                                    /mod_base= OTHER
/note= "Phosphorothioate backbone and all cytidines are
-methyl cytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disorder, particularly cancer ((e.g. colorectal cancer), diabetes, reduced glucose tolerance, insulin resistance and obesity. The present sequence is an antisense oligonucleotide targeting human PRL3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                protein tyrosine phosphatase type IVA member 3; colorectal cancer; diabetes; glucose tolerance; insulin resistance; obesity; hyperproliferative disorder; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                 Antisense oligonucleotide targeting human PRL3 ISIS 217398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 15.4; DB 1; Length 20;
94.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                    /mod_base= OTHER
/mod_base= 2'.methoxyethyl residues"
16..20
/*tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                                       'note= "2'-methoxyethyl residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                  Human; antisense gene therapy; ss; PRL3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 15; SEQ ID NO 23; 77pp; English.
                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                         base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             857 AGGACCTGAAGCAGTAC 873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-JUN-2002; 2002US-00177554.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-JUN-2002; 2002US-00177554.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19 AGGACCTGAAGAAGTAC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94.1%;
                               22-APR-2004 (first entry)
                                                                                                                                                                                                                                    1. .20
/*tag= b
                                                                                                                                                                                                                                                                                                                                      /*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best_Local Similarity 94.1
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-070585/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dobie KW, Zhang H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2003235911-A1
                                                                                                                                                                                                                    Key
modified_base
                                                                                                                                                                                                                                                                                                                     modified_base
                                                                                                                                                                                                                                                                                                                                                                                      modified base
                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-DEC-2003
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ADI28258;

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The invention relates to a compound comprising a sequence comprising 8-80 base pairs (bp) targeted to a nucleic acid encoding MARK3 (MAP) microtubule affinity-regulating kinase 3), that specifically of MARK3, i.e. is an antisense oligonucleotide (AO). Also included are a composition comprising the compound and a carrier or diluner, inhibiting the expression of MARK3 in cells or tissues, treating an animal having or suspected of having a disease or condition associated with MARK3 and screening for an antisense compound. The antisense oligonucleotide is useful for preparing a composition for treating hyperproliferative diseases. Particularly cancer and neurodegenerative diseases e.g. Alzheimer's disease. The present sequence is a MARK3 cDNA target region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense compound targeted to a nucleic acid molecule encoding microtubule-affinity-regulating kinases (MARK3), useful for modulating expression of MARK3 or for treating cancer or Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense oligonucleotide targeting human MARK3 ISIS 151469.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.9%; Score 15.4; DB 1; Length 20;
94.1%; Pred. No. 5.3e+02;
ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; antisense gene therapy; ss; MARK3;
MAP/microtubule affinity-regulating kinase 3; cancer;
Alzheimer's disease; neurodegenerative disorde;
hyperproliferative disorder; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                        MAP/microtubule affinity-regulating kinase 3; c. Alzheimer's disease; neurodegenerative disorde; hyperproliferative disorder; cytostatic.
                               Human; antisense gene therapy; ss; MARK3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 90; 233pp; English.
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/*tag= b
/mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dobie KW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 971 TACACCGAGACCTCAAG 987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
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                                                                                                                                                                                                                                                                                                                                                                                                          17-JUN-2002; 2002US-00174319.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUN-2002; 2002US-00174319
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les 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 TACATCGAGACCTCAAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-052188/05
                                                                                                                                                                                                                                                                       US2003232771-A1
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modified base
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                                                                                                                                                                                                        Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ward DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADI29100;
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ADI29100/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         THE LATE OF THE FLAT OF THE FL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a compound comprising a sequence comprising 8-80 base pairs (bp) targeted to a nucleic acid encoding protein tyrosine phosphatase type 1VA member 3 (PRL-3), that specifically hybridises with the nucleic acid encoding PRL-3 and inhibits expression of PRL-3, i.e. is an antisense oligonucleotide (AO). Also included are a composition comprising the compound and a carrier or diluent, inhibiting the expression of PRL-3 in cells or tissues, treating an animal having or suspected of having a disease or condition associated with PRL-3 and screening for an antisense compound. The antisense oligonucleotide is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotide, comprising a sequence targeted to a nucleic acid encoding protein tyrosine phosphatase type IVA member 3 (PRL -3), useful for preparing a composition for treating hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 useful for preparing a composition for treating hyperproliferative disorder, particularly cancer ((e.g. colorectal cancer), diabetes, reduced glucose tolerance, insulin resistance and obesity. The present sequence is a Human PRL3 cDNA AO target region.
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                                                                                                                                                                                                                                                                                                                                                                      Human; antisense gene therapy; ss; PRL3;
profein tyrosine phosphatase type IVA member 3; colorectal cancer;
diabetes; glucose tolerance; insulin resistance; obesity;
hyperproliferative disorder; cytostatic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 16; SEQ ID NO 165; 77pp; English
                                                                                                                                                                                                                                                                                                              Human PRL3 antisense target region #2.
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                                                                                                         ADI28258 standard; cDNA; 20 BP.
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Les 16; Conservative
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RESULT 302
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Query Match

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AD129170

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RESULT 303

ADI29170

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The invention relates to a compound comprising a sequence comprising 8-80 base pairs (bp) targeted to a nucleic acid encoding MARK3 (MAP/microtubule affinity-regulating kinase 3), that specifically hybridises with the nucleic acid encoding MARK3 and inhibits expression of MARK3, i.e. is an antisense oligonucleotide (AO). Also included are a composition comprising the compound and a carrier or diluter, inhibiting the expression of MARK3 in cells or tissues, treating an animal having or suspected of having a disease or condition associated with MARK3 and screening for an antisense compound. The antisense oligonucleotide is useful for preparing a composition for treating hyperproliferative disorder, particularly cancer and neurodegenerative diseases e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, ss; antisense gene therapy; protein phosphatase 2A A subunit;
PPP2RIA; serine/threonine phosphatase; cancer, neurodegenerative disease;
vial infection; parasitic infection; apoptotic disorder;
/note= "Phosphorothioate backbone and all cytidines are -methyl cytidines"
                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound targeted to a nucleic acid molecule encoding microtubule-affinity-regulating kinases (MARK3), useful for modulating expression of MARK3 or for treating cancer or Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.9%; Score 15.4; DB 1; Length 20;
14.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
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                                                                                                               /*tag= c
/mod_base= OTHER
/note= "2'-methoxyethyl residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                /note= "2'-methoxyethyl residues'
16. .20
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                                                               mod_base= OTHER
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Best Local Similarity
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                              modified base
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The invention relates to a compound 8-80 mucleobases in length targeted to, and which specifically hybridises with a nucleic acid molecule encoding PPPRATA (protein phosphatase 2A A subunit), and inhibits the encoding PPPRATA (protein phosphatase 2A A subunit), and inhibits the carport of PPPRATA, i.e. is an antisense oligonucleotide (AS). Also included are a compound 8-80 nucleobases in length that specifically by hybridises with at least an 8-nucleobase portion of an active site on a nucleic acid molecule encoding PPPRATA, a composition comprising the compound and a carrier or diluent, inhibiting the expression of PPPRATA or compound and a carrier or diluent, inhibiting the expression of PPPRATA is inhibited), treating an animal having a disease or condition associated with PPPRATA (by administering to the animal a therapeutic or prophylactic amount of the compound so that compound so the compression of PPPRATA with one or more candidate antisense compound (comprising at least an 8-nucleobase portion that is complementary to the preferred target region and selecting for one or more candidate antisense compounds compounds that inhibit the expression of an uncleic acid encoding compound compounds compounds compounds compounds compounds compound composition and selecting for one or more candidate antisense compounds compound composition and selecting an uncleic acid encoding are useful for treating an animal and methods are useful for treating and animal and methods are useful for treating and animal and anima
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding PPP2R1A, useful for treating a neurodegenerative or hyperproliferative disorder e.g. cancer, or diseases arising from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              disease or condition associated with PPP2RIA, such as a neurodegenerative disorder, a hyperproliferative disorder, e.g. cancer, or a disease or condition arising from aberrant apoptosis, viral or parasitic infection.
                                                                                                /note= "Phosphorothioate backbone and all cytidines are-methyl-cytidine"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.9%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 5.3e+02; tive 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         oligonucleotide for human PPP2R1A of the invention
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                                                                                                                                                                    /*tag= a
/mod_base= OTHER
/note= "2'-methoxyethyl residue'
16. 20
                                                                                                                                                                                                                                                                                                                               /note= "2'-methoxyethyl residue
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Location/Qualifiers
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Best Local Similarity 94.1
Matches 16; Conservative
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Gaps . 0

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/note= "sugar phosphate internucleotide linkages in the
backbone are replaced with a phosphorothioate
                                                                                                                                                                                      /mod_base= OTHER
/note= "nucleotides are 2'-methoxyethyl-nucleotides"
16. .20
/*taga /
/mod_base OTHER
/note= "nucleotides are 2'-methoxyethyl-nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New compounds, particularly antisense oligonucleotides, nucleic acid molecule encoding forkhead box 01A, useful
                                                                                                                              /mod_base= OTHER
/note= "all C are 5'-methylcytidines"
                                                                                  internucleotide linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Veniant-Ellison M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 14; SEQ ID NO 21; 146pp; English.
            Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cancer, or type 2 diabetes.
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(ISIS-) ISIS PHARM INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-330164/30
               Key
misc difference
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a compound 8-80 nucleobases in length targeted to a nucleic acid molecule encoding forkhead box OlA, where the compound is at least 70% complementary to a nucleic acid molecule encoding forkhead box OlA and modulates expression of forkhead box OlA by at least 10%. The compound is useful for treating an animal having a disease or condition associated with forkhead box OlA, e.g. a hyperproliferative disorder (cancer, preferably rhabdomyosarcoma), or type 2 diabetes. This sequence corresponds to a targeted sequence from the human foxhead box
                                                                                                                                            ss; cytostatic; antidiabetic; foxhead box OIA inhibitor; forkhead box OIA; hyperproliferative disorder; cancer; rhabdomyosarcoma; diabetes; H-ras gene; antisense; gene expression; primer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          targeted to for for treating
                                                                                                                                                                                                                                                                                                                                                                                                 Shutter JR;
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94.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                          New compounds, particularly antisense oligonucleotides, nucleic acid molecule encoding forkhead box 01A, useful
                                                                                                                                                                                                                                                                                                                                                                                                 Lindberg RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 6 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                 Human foxhead box OlA gene target sequence #4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 18; SEQ ID NO 101; 146pp; English
                                                                                                                                                                                                                                                                                                                                                                                                 Veniant-Ellison M,
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                             BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cancer, or type 2 diabetes.
                             ADN97811 standard; DNA; 20
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                                                                                     (first entry)
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Best Local Similarity 94.1
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                   Dobie KW, Bhanot S,
                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-330164/30
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                                                                                                                                                                                                        Homo sapiens
                                                                                       01-JUL-2004
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                                                        ADN97811;
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RESULT 306
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targeted to a for treating

Shutter JR;

Lindberg RA,

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The invention relates to a compound 8-80 nucleobases in length targeted to a nucleic acid molecule encoding forkhead box OIA, where the compound is at least 70% complementary to a nucleic acid molecule encoding forkhead box OIA and modulates expression of forkhead box OIA by at least 10%. The compound is useful for treating an animal having a disease or condition associated with forkhead box OIA, e.g. a hyperproliferative disorder (cancer, preferably rhabdomyosarcoma), or type 2 diabetes. This sequence corresponds to an oligonucleotide targeted to the human foxhead box OIA genes in order to inhibit gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Farnesoid X receptor gene expression antisense inhibitory oligo #2097.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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44.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 3 A; 2 C; 9 G; 6 T; 0 U; 0 Other;
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ss; cytostatic; antidiabetic; foxhead box OIA inhibitor; forkhead box OIA; hyperproliferative disorder; cancer; rhabdomyosarcoma; diabetes; H-ras gene; antisense; gene expression; primer.

Synthetic

Human foxhead box OlA sequence inhibitory oligo #4.

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The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for inhibiting the expression of FXR (Farnesoid X receptor) in cells or tissues, or for treating diseases or conditions associated with FXR, such as diabetes, immunological disorders, cardiovascular disorders, e.g. dyslipidemia and its symptoms, atherosclerosis, low HDL (high density lipoprotein) or levated LDL (low density lipoprotein) or hypertholesterolemia, gallstones, hypertriglyceridemia, obesity. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or kits. This sequence corresponds to an antisense oligonucleotide of the
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                  neuroprotective, vasotropic, antisense; gene therapy;
Farnesoid X receptor; diabetes; immunological disorder;
cardiovascular disorder; dyslipidemia; atheroselerosis;
high density lipoprotein; low density lipoprotein; hypercholesterolemia;
gallstones; hypertriglyceridemia; obesity; neurological disorder;
ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides useful for modulating expression of Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders, galistones or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiarteriosclerotic; hepatotropic; litholytic; anorectic; neuroprotective; vasotropic; antisense; gene therapy; Farnesoid X receptor; diabetes; immunological disorder; cardiovascular disorder; dyslipidemia; atherosclerosis; high density lipoprotein; low density lipoprotein; hypercholesterolemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Farnesoid X receptor gene expression antisense inhibitory oligo #1835.
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14.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
antiarteriosclerotic; hepatotropic; litholytic; anorectic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 4; SEQ ID NO 2097; 150pp; English.
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Best Local Similarity 94.1'
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                                                                                                                                                           Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                             Kane CD;
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The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for inhibiting the expression of FXR (Farnesoid X receptor) in cells or tissues, or for treating diseases or conditions associated with FXR, such dyslipidemia and its symptoms, atheroscierosis, low HDL (high density lipoprotein), elevated LDL (low density lipoprotein) or hypercholesterolemia, gallstones, hypertiiglyceridemia, obesity, hypercholesterolemia, gallstones, hypertiiglyceridemia, obesity, composition is used for diagnostics, prophylaxis, or as research reagents of whits. This sequence corresponds to an antisense oligonucleotide of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides useful for modulating expression of Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders, gallstones or obesity.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
gallstones; hypertriglyceridemia; obesity; neurological disorder; ischemia; reperfusion; diagnostics; prophylaxis.
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4.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
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hyperproliferative disorder; cancer; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 4; SEQ ID NO 1835; 150pp; English.
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Best Local Similarity 94.1
Matches 16; Conservative
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                                                                                                       Homo sapiens
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New compound that modulates PIM-1 expression, useful in treating an animal having a disease or condition, i.e. hyperproliferative disorder.
                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 32; 51pp; English.
                                                                                                                                   Query Match
Best Local Similarity 94.1'
Matches 16; Conservative
             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                              WPI; 2004-374981/35
                               WPI; 2004-374981/35
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The invention relates to a compound targeted to a nucleic acid molecule encoding the human PIM-1 polypeptide. The compound is an antisense obligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiet, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of the human PIM-1 polypeptide and in preparation of a composition for treating hyperproliferative disorders, e.g. cancer. This sequence repersents a human PIM-1 DNA antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; forkhead box OlA; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; rhabdomyosarcoma; type 2 diabetes; cytostatic; antidiabetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a compound targeted to a nucleic acid molecule encoding the human forkhead box OlA polypeptide. The compound is an antisense oligonuclectide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage is. a pasphorothicate linkage, at least one modified supar moiety, preferably a 2 · O-methoxyethyl sugar motety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New compounds, particularly antisense oligonucleotides, targeted to a
nucleic acid molecule encoding forkhead box OIA, useful for treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shutter JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human forkhead box OlA DNA antisense oligonucleotide target region
                                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 15.4; DB 1; Length 20;
14.1%; Pred. No. 5.3e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Veniant-Ellison M, Lindberg RA,
                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 18; SEQ ID NO 101; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               249 TGACCCTGGAGAGGCCC 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-SEP-2003; 2003US-00671074.
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                                                                                                                                                                                                                                                                                                                                                                                                     94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cancer, or type 2 diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADN40747 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19 rearccrecadadeccc
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                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 94.1
Matches 16; Conservative
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LINDBERG R A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jobie KW, Bhanot S,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-389194/36.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-AUG-2004
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                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 312
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comparising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of the human PIM-1 polypeptide and in preparation of a composition for treating hyperproliferative disorders, e.g. cancer. This sequence represents a human PIM-1 DNA antisense
                                                                                                                                                                                                                                                                                                                                                        The invention relates to a compound targeted to a nucleic acid molecule encoding the human PIM-1 polypeptide. The compound is an antisense oligonoucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e.
                                                                                                                                                                                                                                        New compound that modulates PIM-1 expression, useful in treating an animal having a disease or condition, i.e. hyperproliferative disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; PIM-1; ss; antisense oligonucleotide; phosphorothioate linkage;
2'-0-methoxyethyl sugar moiety; 5-methylcytosine;
hyperproliferative disorder; cancer; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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34.1%; Pred. No. 5.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    oligonucleotide target region of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PIM-1 DNA antisense oligonucleotide #20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                               Example 15; SEQ ID NO 102; 51pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               249 TGACCCTGGAGAGGCCC 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 rdarccredadadeccc 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADN03063 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-NOV-2002; 2002US-00292849.
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                                           11-NOV-2002; 2002US-00292849.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94.18;
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#4

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Gaps

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25-SEP-2003; 2003US-00671074.
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                                                                                                                                                                                                                                            cancer, or type 2 diabetes.
                                                                                  ADN40667 standard; DNA; 20
                                                                                                                                                                                           (BHAN/) BHANOT S.
(VENI/) VENIANT-ELLISON
(LIND/) LINDBERG R A.
(SHUT/) SHUTTER J R.
                                                                                                                                                                                                                Dobie KW, Bhanot S,
                                                                                                                                                                                                                         WPI; 2004-389194/36.
                                                                                                                                                                                       DOBI/) DOBIE K W.
                                                                                                                                                   JS2004097459-A1.
                                                                                                                                           Homo sapiens
                                                                                                   12-AUG-2004
                                                                                                                                                            20-MAY-2004.
                                                                                           ADN40667;
                                                                              ADN40667/c
8X33333
                                                           g
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The invention relates to a compound targeted to a nucleic acid molecule encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound is an antisense oligonuclectide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonuclectide comprises at least one modified internucleoside linkage Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-0-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic. preparation of a composition for treating hyperproliferative disorders, e.g. cancer. This sequence represents a rat MMP11 DNA antisense oligonucleotide target region of the invention. New oligonucleotide compound that inhibits expression of matrix metalloproteinase 11, useful for preparing a composition for treating hyperproliferative disorder, e.g., cancer. i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2.0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of the MMPII polypeptide and in 0.9%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 5.3e+02; lve 0; Mismatches 1; Indels 0.9%; Score 15.4; DB 1; Length 20; 94.1%; Pred. No. 5.3e+02; Rat MMP11 DNA antisense oligonucleotide target region #3 1; Indels Sequence 20 BP; 3 A; 2 C; 9 G; 6 T; 0 U; 0 Other; Sequence 20 BP; 2 A; 9 C; 8 G; 1 T; 0 U; 0 Other; 0; Mismatches Example 16; SEQ ID NO 231; 76pp; English. 1381 GCCGACCTCCTCACCAA 1397 1038 TGGCCTGGCCCGAGCCA 1054 10-DEC-2002; 2002US-00316755. 17 GCGACCTCATCACCAA 1 10-DEC-2002; 2002US-00316755. 94.18; 94.18; ADP27305 standard; DNA; 20 (first entry) 16; Conservative (ISIS-) ISIS PHARM INC. Baker BF, Cowsert LM; WPI; 2004-440341/41. Query Match Best Local Similarity Matches 16; Conserv Local Similarity US2004110152-A1. preparation of 26-AUG-2004 10-JUN-2004 ADP27305; Query Match RESULT 314 Matches ADP27305, ð d à The invention relates to a compound targeted to a nucleic acid molecule encoding the human forkhead box OlA polypeptide. The compound is an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothiote linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified uncleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of the human forkhead box OlA hyperproliferative disorders, e.g. cancer, preferably rhabdomyosarcoma, and type 2 diabetes. This sequence represents an antisense conjugance of the invention. . 0 Human, forkhead box OlA, ss; antisense oligonucleotide, phosphorothioate linkage, 2'-O-methoxyethyl sugar moiety, 5-methylcytosine, hyperproliferative disorder; cancer; rhabdomyosarcoma, polypeptide and in preparation of a composition for treating hyperproliferative disorders, e.g. cancer, preferably rhabdomyosarcoma, and type 2 diabetes. This sequence represents a human forkhead OlA DNA antisense oligonucleotide target region of the invention. Gaps New compounds, particularly antisense oligonucleotides, targeted to a nucleic acid molecule encoding forkhead box OIA, useful for treating Shutter JR; useful for modulating the expression of the human forkhead box OIA . 0 Query Match 0.9%; Score 15.4; DB 1; Length 20; Best Local Similarity 94.1%; Pred. No. 5.3e+02; Matches 16; Conservative 0; Mismatches 1; Indels Human forkhead box OlA DNA antisense oligonucleotide #4. Veniant-Ellison M, Lindberg RA, Sequence 20 BP; 6 A; 9 C; 2 G; 3 T; 0 U; 0 Other; type 2 diabetes; cytostatic; antidiabetic. Claim 14; SEQ ID NO 21; 80pp; English 1381 GCCGACCTCCTCACCAA 1397 4 GCCGACCTCATCACCAA 20 ВР (first entry)

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Gaps

0

17 resecrissecesses

RESULT 315

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The invention relates to a compound targeted to a nucleic acid molecule encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound is an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-0-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of the MMP11 polypeptide and in preparation of a composition for treating hyperproliferative disorders, e.g. cancer. This sequence repersents an antisense oligonucleotide targeted to DNA encoding the rat MMP11 polypeptide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human beta-site APP-cleaving enzyme 2 DNA antisense oligonucleotide #10.
                                                                                                                                        Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; beta-site APP-cleaving enzyme 2; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; sporadic inclusion-body myositis; cancer; cytostatic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New oligonucleotide compound that inhibits expression of matrix metalloproteinase 11, useful for preparing a composition for treating hyperproliferative disorder, e.g., cancer.
                                                                                                         Rat matrix metalloproteinase 11 DNA antisense oligonucleotide #5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 1 A; 8 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 16; SEQ ID NO 100; 76pp; English
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                                                                                                                                                                                                                                                                                                                                   10-DEC-2002; 2002US-00316755.
                                                                                                                                                                                                                                                                                                                                                                        10-DEC-2002; 2002US-00316755
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ADP27174 standard; DNA; 20
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                                                                         (first entry)
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Best Local Similarity 94.1
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                             Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-440341/41.
                                                                                                                                                                                                                       Rattus norvegicus
                                                                                                                                                                                                                                                          US2004110152-A1
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                                                                     26-AUG-2004
                                                                                                                                                                                                                                                                                              10-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                             Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADQ08032;
                                    ADP27174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 316
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encoding the human beta-site APP-cleaving enzyme 2 polypeptide. The compound is an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense APP-cleaving enzyme 2 polypeptide and for treating diseases associated with expression of beta-site APP-cleaving enzyme 2 such as sporcated with expression of beta-site APP-cleaving enzyme 2 such as sporcated with expression of seasons as sociated with expression of seasons as sociated with expression of seasons as sociated and seasons as sporcated and seasons of seasons as sociated and seasons as seasons as sociated and seasons as sociated and seasons as sociated and seasons as a seasons as sea
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense compound, useful for treating diseases associated with expression of beta-site amyloid precursor protein (APP)-cleaving enzyme 2 such as sporadic inclusion-body myositis and cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         inclusion-body myositis and cancer. This sequence represents an antisense oligonucleotide targeted to DNA encoding the human beta-site APP-cleaving
                                                                                                    /mod_base= OTHER
/note= "OTHER= Phosphorothioate backbone. All cytidines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a compound targeted to a nucleic acid molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; beta-site APP-cleaving enzyme 2; ss; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                    /*tag= c
/mod base= OTHER
/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                    note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human beta-site APP-cleaving enzyme 2 DNA target region #9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
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                                                                                                                                        are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 19; SEQ ID NO 20; 61pp; English.
                   Location/Qualifiers
                                                                                                                                                                                                                                      'mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    526
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-JUN-2002; 2002US-00163272.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    510 CTACCTGGAGAAGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADQ08109 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18 CTACCTGGAGATGCTGA
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                                                                                                                                                                                                             *tag= a
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                                                                                                                                                                                                                                                                                        15. .20
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*tag=
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                                                                                                                              US2004132681-A1
                         Key
modified_base
                                                                                                                                                                                    modified base
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Gaps

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Length 20; 1; Indels

0.9%; Score 15.4; DB 1; 94.1%; Pred. No. 5.3e+02; live 0; Mismatches 1;

BP.

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encoding the human beta-site APP-cleaving enzyme 2 polypeptide. The compound is an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably 2 2'-o-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methyloytosine. The antisense compounds are useful for modulating the expression of the human beta-site APP-cleaving enzyme 2 polypeptide and for treating diseases associated with expression of beta-site APP-cleaving enzyme 2 such as sporadic inclusion-body myositis and cancer. This sequence represents a human beta-site APP-cleaving enzyme 2 bNA antisense oligonucleotide target region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense compound, useful for treating diseases associated with expression of beta-site amyloid precursor protein (APP)-cleaving enzyme 2 such as sporadic inclusion-body myositis and cancer.
                                                                                                                                         /note= "OTHER= Phosphorothioate backbone. All cytidines are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a compound targeted to a nucleic acid molecule
phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; sporadic inclusion-body myositis; cancer; cytostatic.
                                                                                                                                                                                                               /mod_base= OTHER
/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
15. .20
                                                                                                                                                                                                                                                                                               /note= "OTHER= 2'-0-Methoxyethyl (2'-MOE) nucleotides"
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94.1%; Pred. No. 5.3e+02;
Ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 97; 61pp; English.
                                                                                 Location/Qualifiers
                                                                                                                                 /mod base= OTHER
                                                                                                                                                                                                                                                                  /*tag= c
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             526
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                               04-JUN-2002; 2002US-00163272.
                                                                                                                                                                                                                                                                                                                                                                                              16-SEP-2003; 2003US-00663452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           510 CTACCTGGAGAAGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAV13323 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
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                                                                                                1. .20
/*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             (DOBI/) DOBIE K W.
                                                                                                                                                                                                                                                                                                                               US2004132681-A1
                                                                                 Key
modified_base
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                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                08-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dobie KW;
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 HXXXH
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Classifying patients with inflammatory disease, specifically asthma -according to polymorphisms in 5-lipoxygenase gene regulatory region, e.g. to identify candidates for lipoxygenase inhibitor treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence was used in the development of a novel method for classifying patients suffering from an inflammatory disease. The method comprises identifying in DNA from at least 1 patient a sequence polymorphism, as compared with the normal 5-lipoxygenase (5-LOX) gene (AAT88431), in a 5-LOX regularory gene sequence. The method can be applied to subjects with asthma, ulcerative colitis, bronchitis, ansumatitis, psoriasis, allergic and non-allergic rhinitis, lupus or rheumatoid arthritis. Specifically it can be used to diagnose asthma or susceptibility to disease, identify treatments suitable for individual patients or assess the likely success of treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Haematopoietic stem cell growth factor; SCGF; burst-promoting activity; BPA; granulocyte macrophage colony stimulating activity; gene therapy; GPA; haematopoietic cell disorder; bone marrow inhibition; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                            Inflammatory disease; polymorphism; 5-lipoxygenase; asthma; ulcerative colitis; bronchitis; sinusitis; psoriasis; rhinitis; arthritis; diagnosis; treatment; PCR primer; ss.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; Score 15.4; DB 1; Length 21; 94.1%; Pred. No. 5.6e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Primer for Human haematopoietic stem cell growth factor.
                                                                                                                                                                                                                                                                                                                                                Grobholz J;
               Sense primer Exon 5 for human 5-lipoxygenase gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                               In K, Asano K, Beier D,
                                                                                                                                                                                                                                                                                                              (BGHM ) BRIGHAM & WOMENS HOSPITAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 19; 56pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 992 AGAACCTGCTCATCAAC 1008
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                                                                                                                                                                                                                               97WO-US007137.
                                                                                                                                                                                                                                                                  96US-0016890P
                                                                                                                                                                                                                                                                               97US-00846020
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les 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                             WPI; 1997-558997/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR primer; ss.
                                                                                                                                                                                                                                                                06-MAY-1996;
                                                                                                                                                                                                                               29-APR-1997;
                                                                                                                                Homo sapiens
                                                                                                                                                               W09742347-A2
                                                                                                                                                                                                                                                                               25-APR-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9808869-A1
                                                                                                                                                                                               13-NOV-1997.
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                                                                                                                                                                                                                                                                                                                                               Drazen JM,
                                                                                                               Synthetic
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(WHED ) WHITEHEAD INST BIOMEDICAL RES. (MILL-) MILLENNIUM PHARM INC.
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                                                                                                                                                                                                              Example; Page 197; 242pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          731
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-OCT-2001; 2001WO-US047719.
16-AUG-2000; 2000US-0225724P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ilarity 94.1%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGAACGTGAAGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          715 CTGGAACATGAAGAGGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-471441/50.
                                                                                                      WPI; 2001-226749/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
nes 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Escherichia coli.
                                                                                                                                                                                   atherosclerosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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                                                                                                                                                                                                                                                                                                    This sequence is a primer for DNA encoding the human haematopoietic stem cell growth factor (SCGF) of the invention. The polypeptide of the invention is of mammalian origin and has haematopoietic stem cell growth factor SCGF activity, including burst-promoting activity (BPA) and granulocyte macrophage colony stimulating activity (GPA). The products can be used for treatment, diagnosis and analysis of haematopoietic cell disorders and bone marrow inhibition, e.g. by cytotoxic anticancer agents such as 5-fluorouracil. The products can also be used for amplification of haematopoietic cells in vitro, e.g. for use in marrow grafting and gene therapy by insertion of SCGF gene using a suitable therapeutic
                                                                                                                                                                                                              Haematopoietic stem cell growth factor – useful for, e.g. treatment and diagnosis of haematopoietic cell abnormalities and bone marrow
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; variant thrombospondin 1; variant thrombospondin 4; SNP; polymorphism; vascular disease; coronary artery disease; forensics; myocardial infarction; atherosclerosis; stroke; venous thromboembolism; pulmonary embolism; paternity test; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 15.4; DB 1;
Pred. No. 5.6e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human gene single nucleotide polymorphism #2172.
                                                                                                                                                                                                                                                                            Example 21; Page 49; 85pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                      Sugimura A, Mio H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            replace (11, A)
                               97WO-JP002985.
                                                            96JP-00262252,
                                                                         97JP-00087242.
97WO-JP002349.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.9%;
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                                                                                                                       (KYOW ) KYOWA HAKKO KOGYO KK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTGCATTAAGCTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       614 CCTACATTAAGCTGGAC
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nes 16; Conservative
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                              27-AUG-1997;
                                                            27-AUG-1996;
                                                                                           07-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                           24-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-MAR-2001
                                                                                                                                                                                                                                               inhibition,
                                                                                                                                                      Hiraoka A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF97411;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13
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The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocardial infarction, coronary heart disease, retroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also useful in forensics, paternity testing, genetic analysis and phenotype correlations to diseases. The present sequence is an example of one of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New pO157 plasmid-specified polypeptide found in Escherichia coli and other enterohemorrhagic Escherichia coli, that binds to and cleaves Clesterase inhibitor, useful for diagnosing and treating colitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pO157 plasmid; stcE protein; haemolytic uraemic syndrome; proteolysis; C1-esterase inhibitor; enterohaemorrhagic pathogen; antiinflammatory; colitis; antibacterial; antidiarrhoeic; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Escherichia coli p0157 plasmid DNA amplifying PCR primer, stcE3'1773.
     Mccarthy JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                              applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and
                                                                                                                                                                                                         Nucleic acids comprising single nucleotide polymorphisms, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
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14.1%; Pred. No. 5.6e+02;
ve 0; Mismatches 1; Indels
     Daley GO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 6 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the human gene SNPS shown in the specification
Lander ES, Gargill M, Ireland JS, Bolk S,
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Example; Page 24; 58pp; English.

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The present invention relates to novel pol57 plasmid-specified proteins found in Escherichia col1 EDL933 and other enterchaemorrhagic B. coli, designated StcB, that bind to and cleave Cl-esterase inhibitor. Sequences of the invention are useful for diagnosing, preventing or treating hamolytic uraemic syndrome or colitis in a subject infected with an enterchaemorrhagic pathogen expressing inhibitor protein. They are useful for testing a molecule for the ability to reduce proteolysis of Cl for testing a molecule for the ability to reduce proteolysis of Cl primer which is used for amplifying B. coli pol57 plasmid DNA encoding StcE protein. This primer is used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention describes a novel method for for detection of high viral concentrations in blood plasma or serum by restriction of PCR sensitivity through suboptimal nucleic acid extraction, amplification and detection conditions. The method described is used to detect high concentrations of Parvovirus in the blood plasma or serum of humans. The method detects Parvovirus DNA with a content in humans of greater than 106 to 107 genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Process to detect high concentrations of virus in blood plasma or serum, by restricting the sensitivity of PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Detection, viral concentration, blood plasma, serum, PCR sensitivity, extraction, amplification, detection, PCR primer, ss.
                                                                                                                                                                                                                                                                0.9%; Score 15.4; DB 1; Length 21;
94.1%; Pred. No. 5.6e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                               Sequence 21 BP; 5 A; 4 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                         1220 CGGTGGAGGAACAGCTA 1236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 6; 8pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВР
                                                                                                                                                                                                                                                                                                                                                                             1 CGGTGGAGGAACGGCTA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98EP-00120799.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97DE-01052898.
                                                                                                                                                                                                                                                                                   94.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Parvovirus B19 PCR primer 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CENT-) CENTEON PHARMA GMBH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX57349 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                   Local Similarity 94.1 es 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Groener A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-329400/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EP922771-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Parvovirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Weimer T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX57349;
                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 322
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Gaps

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The present invention describes a method for treating, preventing or delaying neoplasm in a mammal. The method comprises administering an BrbB - 3 protein, a mucleic acid encoding an ErbB-3 protein, or their c functional fragments, where an immune response is generated against the neoplasm. ErbB-3 has cytostatic activity, and can be used in gene concepts. The method is useful for treating, preventing or delaying or neoplasms (e.g. adrenal gland, anus, auditory nerve, bile ducts, bladder, bone, brain, breast, buccal, central nervous system, cervix, colon, ear, bone, brain, breast, buccal, central nervous system, cervix, colon, ear, confometrium, oseophagus, eye, eyelids, fallopian tube, gastrointestinal cract, head and neck, heart, kidney, larynx, liver, lung, mandible, covary, pancreas, parotid gland, penis, pinna, pituitary, prostate gland, crectum, retina, salivary glands, skin, small intestine, spinal cord, stomach, testes, thyroid, tonsil, uterha, uterus, vagina, cord, vestibulocochlear nerve, or vulva neoplasm), or cancers (breast, ovary, stomach, prostate, colon and lung cancel). The present sequence crepresents an oligonucleotide used in the construction of a plasmid cord, comprising BrbB-3, which is used in an example from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Use of an ErbB-3 protein, a nucleic acid encoding an ErbB-3 protein or their fragments, for treating, preventing or delaying neoplasms (e.g. urethra, uterus, vagina or vulva neoplasm) or cancers (e.g. breast, ovary or colon cancer).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                   neoplasm; ErbB-3; immune response; cytostatic; gene therapy; cancer;
                                                                                                                                                                                                                                                 DE3-1 plasmid construction related oligonucleotide SEQ ID NO:11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 15.4; DB 1; Length 23;
Pred. No. 6e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 23 BP; 7 A; 12 C; 3 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ZENS-) ZENSUN SHANGHAI SCI TECH LID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example; SEQ ID NO 11; 68pp; English
1226 AGGAACAGCTACACTTC 1242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      245
                       2 AGGCACAGCTACACTIC 18
                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-2003; 2003WO-CN000217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAR-2002; 2002CN-00116259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94.18;
                                                                                                                               ADE36722 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    229 AGTGGTGGTGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 Agregregregregreg
                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.9
Best Local Similarity 94.1
Matches 16, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-876924/81.
                                                                                                                                                                                                                                                                                                                                                                                                     WO2003080835-A1
                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                           29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                           02-OCT-2003
                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                           human; ss
                                                                                                                                                                     ADE36722;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zhou M;
                                                                                             RESULT 323
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Gaps

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0.9%; Score 15.4; DB 1; Length 23; 94.1%; Pred. No. 6e+02; tive 0; Mismatches 1; Indels

Best Local Similarity 94.1 Matches 16, Conservative

Query Match

Sequence 23 BP; 6 A; 10 C; 4 G; 3 T; 0 U; 0 Other;

equivalents

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09-AUG-1994;
                                                               misc_feature
                                                                                                                                  WO9504748-A1
                                                                                                                                                                                          09-AUG-1993;
                                                                                                                                                                                                                               Anderson KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-JUL-1999
                                                                                                                                                     16-FEB-1995,
                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX63365;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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                                                        Key
田文文文章
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0
                                                                                                                                                                                                                                                                                                                                                                                          AAT11971-84 are antisense oligonucleotides (ONs) against human cytomegalovirus (CMV) that displayed activities of at least 50 % of control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal mismatches could be tolerated without loss of antiviral activity. Antisense ONs targeting GMV DNA or RNA coding for the IEI, IE2 or DNA polymerase proteins have been shown to be effective in therapy, polymerase proteins so CMV infection. The ONS may be modified to reduce nuclease resistance and to increase their efficacy. Modifications include phosphorothicate backbones, alkyl and halogen-substituted sugar modelies at the 2' position. (Updated on 25-MAR-2003 to correct PF
                                                                                                                                                                                                                                                                                                                                    binding to
                                                                                                      antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis; intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                  New oligo-nucleotide inhibits cytomegalovirus replication - by bindin
a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and
treatment of CMV diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 15.2; DB 1; Length 20;
Pred: No. 5.8e+02;
0; Mismatches 3; Indels
                                                                                                                                                                       /*tag= a
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peptide nucleic acid targetting CMV IE2 nuc sig 2.
                                                                                    CMV antisense oligonucleotide (ISIS 5477).
                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                          Example 10; Col 17; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                Draper K, Anderson K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 CGCAAGAAGAAGAGCAAACG 1
     93US-00009263
                                                                                                                                                                                                                                                          92US-00927506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%;
ilarity 85.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAT01675 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
les 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-DEC-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT01675;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT01675,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BXXXXXB
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New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5' untranslated region, intron/exon (I/E) junction or coding sequence of cytomegalovirus gene selected from DNA polymerase, IEI and IE2, or hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a papillomavirus. The PNAs can be used to target RNA and single stranded DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and to appillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which a first PNA strand binds with RNA or saphA and a second PNA strand binds with the resulting double helix or with the first PNA strand binds with the areal binds helix or with the first PNA strand binds can obsess no significant charge and are water soluble, which facilitates cellular uptakes. Futher, since they contain amides of non-biological amino acids, they are biostable and resistant to ensymatic degradation by proceases. The present sequence targets CNV IEZ nuclear localisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                             /*tag= a //note= "at least one (and preferably all) of the backbone subunits are composed of amide units, so that the oligomer consists of the nucleobases attached covalently to a polyamide backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma:virus - are stable anti:sense molecules with high affinity for single stranded DNA, used for treating infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ecker DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.9%; Score 15.2; DB 1;
15.0%; Pred. No. 5.8e+02;
.ve 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Granule bound starch synthase primer #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mirabelli CK,
                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 2; Page 44; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 CGCAAGAAGAAGAGCAAACG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94WO-US009039.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93US-00104438.
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                                     antiviral; diagnostic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 85.0 tes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Crooke ST,
                                                                                                                                                                                                                                                                    *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1995-090841/12.
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Tue Nov

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The present invention describes an enzymatic nucleic acid molecule (I) with RNA cleaving activity, which modulates the expression of a plant gene. Also described is a gene comprising a cDNA sequence encoding maize Delta-9 desaturase. (I) can be used to modulate expression of a gene, preferably Delta-9 desaturase or a granule bound starch synthase (GBSS) gene, in a plant (preferably a maize or canola plant). (I) can be used to modulate casfieine synthesis in a coffee plant, nicotine production in a tobacco plant, flower pigmentation in a nose, petunia, chrysanthemum or marigold plant or lignin production in a tobacco, aspen, poplar or pine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
          Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate; granule bound starch synthase; hammerhead ribozyme; hairpin ribozyme; modulation; gene expression; transgenic plant; cleavage; canola plant; caffeine synthesis; coffee plant; nicotine production; tobacco; fruit ripening; flower pigmentation; lignin production; ss.
                                                                                                                                                                                                                                                                                                                                    Skokut TA;
                                                                                                                                                                                                                                                                                                                                                                                                                 Ribozyme which modulates plant gene expression - preferably modulates expression of DELTA-9 desaturase or granule bound starch synthase in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antisense; oligonucleotide; immediate early; DNA polymerase; CMV; cytomegalovirus; inhibition; replication; sugar modification; phosphorothioate; infection; retinitis; ss.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.9%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                    'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3; Indels
                                                                                                                                                                                                                                                                                                                                 Mcswiggen JA, Merlo PAO, Guo
Merlo DJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 3 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 27; Page 51; 155pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
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                                                                                                                                                                                                                                                    95US-0001135P.
                                                                                                                                                                                                                                                                                     (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX17949 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17; Conservative
                                                                                                                                                                                                                                                                                                                                  Edington BE, Folkerts O,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human herpesvirus 5.
                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1997-202224/18
                                                                                                                                                                                                                                                                                                      DOWELANCO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    maize or canola.
                                                                                                                                                                                                                       12-JUL-1996;
                                                                                                                                                         WO9710328-A2
                                                                                                                                                                                                                                                    13-JUL-1995;
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                                                                                                                                                                                       20-MAR-1997
                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                   Young SA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                  Zwick MG,
                                                                                                                             Zea mays.
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                                                                                                                                                                                                                                                                                                    (DOMC)
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Matches
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This antisense oligonuclectide is targeted to a nucleic acid sequence in the IB (immediate early) 2 region of the cytomegalovirus (CMV) genome and is able to inhibit CMV replication. Optionally the oligonuclectide include at least one 2'-(2-methoxyethoxy) sugar modification or phosphorothicate internuclectide linkages. The oligonuclectides (AAX17861-X1924) are also used to inhibit CMV infections (by in vivo or in vitro contact with cells, tissues or body fluids), especially to treat or prevent CMV infections, particularly retinitis
                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotides that target cytomegalovirus nucleic acid particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps

    .20
    *tag= a
    note= "contains phosphorothioate internucleotide

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.9%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.8e+02;
Live 0; Mismatches 3; Indels
                                                                                     note= "all C bases are 5'-methyl-cytosine
                                                                                                              b
"2'-methoxyethoxy sugar moieties"
                                                                                                                                                                        -methoxyethoxy sugar moieties"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                              Chapman
                                                                                                                                                                                                                                                                                                                                                Kisner DL, Anderson KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              130 CGGATGAAGAAGATCAAACG 149
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                                           linkages"
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Matches 17; Conservative
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*tag=
                                                        . .20
*tag=
                                                                                                                               note=
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Human herpesvirus 5.
  modified base
                                                        modified base
                                                                                                    modified base
                                                                                                                                            modified base
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                                                                                                                                                                                                                                                                                       09-APR-1997;
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                                                                                                                                                                                                                                 15-OCT-1998.
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                                                                                                                                                                                                                                                                                                                                                Draper KG,
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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in a selected gene family; and (c) calculating a comparative index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is can individual, e.g. a fetus. They can also be used for determining the ceffect of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected gene family. Sequences AA217803-218342 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, protein phosphatase genes, PASC enzyments.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genetic proximity, gene expression; cell characterisation; homeobox gene; genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR; kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Identifying and characterizing cells by comparing the pattern of gene expression in a selected gene family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.9%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.8e+02; Matches 17; Conservative 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          superfamily genes or cadherin superfamily genes
expression in a selected gene family.
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                                                 Claim 4; Page 44; 102pp; English
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98IL-00126627.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 330
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA polymerase of cytomegalovirus (CMV) and are able to inhibit CMV replication. Optionally the oligonucleotides include at least one 2'-(2-methoxy) sugar modification or phosphorothicate internucleotide linkages. The oligonucleotides are used to inhibit CMV infections (by in vivo or in vitro contact with cells, tissues or body fluids), especially
                                                                                                                                                                                                                                                                                                   New antisense oligonucleotides that target cytomegalovirus nucleic acid particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Identifying and characterizing cells by comparing the pattern of gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.9%; Score 15.2; DB 1; Length 20;
85.0%; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 treat or prevent CMV infections, particularly retinitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                     Anderson KP, Chapman S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                     Claim 7; Page 30; 99pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 CGCAAGAAGAAGAGCAAACG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAZ18135 standard; DNA; 20 BP.
                                                 98WO-US006895
                                                                                                   97US-00838715
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981L-00126627
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                                                                                                                                                   (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                 WPI; 1998-568330/48.
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P-PSDB; AAY14670.
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16-OCT-1998;
                                                 07-APR-1998;
                                                                                                   09-APR-1997;
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  15-0CT-1998
                                                                                                                                                                                                     Draper KG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     primer; ss
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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell. (b) determining in the first cell and the second cell. (b) determining in the first cell and the second cell. In the pattern of expression of genes in a selected gene family; and (c) calculating a profiled formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is craniformed. They can be used for determining the origin of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired containing cells capable of expressing an homeobox related desired containing the pattern of gene expression in a selected containing the pattern of gene expression in a selected containing the pattern of gene expression in a selected containing the pattern of gene expression. The gene family, can be elected from a set of homeobox genes, kinase genes, containing the pattern of genes, steroid receptor suppared and a selected from a set of percein receptor.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         superfamily genes or cadherin superfamily genes
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STK 21 gene specific primer. AAZ18163 standard; DNA; 20 (first entry) 11-OCT-1999 AAZ18163; RESULT 331 AAZ18163 

Genetic proximity, gene expression, cell characterisation, homeobox gene, genetic defect, reverse transcriptase polymerase chain reaction, RT-PCR, kinase gene, protein phosphatase, P450; steroid receptor, cadherin, primer; ss.

Homo sapiens Synthetic.

WO9934016-A2

08-JUL-1999

98WO-IL000625. 97IL-00122793 28-DEC-1998; 29-DEC-1997;

98IL-00126627.

16-OCT-1998;

(GENE-) GENENA LTD.

Nider B;

WPI; 1999-419113/35. P-PSDB; AAY14698 Identifying and characterizing cells by comparing the pattern of gene expression in a selected gene family.

Claim 4; Page 45; 102pp; English.

The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell

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cell; (b) determinion in the first cell and the second cell the pattern cell; (b) determinion in the first cell and the second cell the pattern cell expression of genes in a selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is transformed. They can be used for detecting a selected genetic defect in an individual, e.g. a fetus. They can also be used for determining the obtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected on the RT-PCR sequences AA217803-218342 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, protein phosphatase genes, PA50 enzyme genes, steroid receptor
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primers AAX86135-56 were used to amplify the penicillin G amidase gene Escherichia coli. The amplified fragment was used to construct the expression vector of the invention. This expression vector comprises the tac promoter, the groESL interpenic region of DNA and the start codon of the groEL gene. Expression of the groEL and/or groES proteins along with the expressed, heterologous protein of interest leads to stabilization of the expressed protein. The new vectors yield higher titers of expressed enzymes relative to prior art vectors such as 17 RNA polymerase-based pET vectors. Also, when constitutive promoters are used in the new vectors,
a second cell comprises: (a) obtaining the first cell and the second
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New high expression vector for Escherichia coli useful for expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      groESL gene, expression vector; tac promoter; groEL; intergenic region; cephalosporin amidase; penicillin G amidase; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer used to amplify the penicillin G amidase gene.
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 5 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                          superfamily genes or cadherin superfamily genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 10; 37pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     970 CTACACCGAGACCTCAAGCC 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 crecaccercaccrcaagac 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX86355 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97US-0069751P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98WO-US026343
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.95
Best Local Similarity 85.0°
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Liu SW, Franceschini T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-457923/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  heterologous genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
Escherichia coli.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9931220-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 332
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BP.

AAX27716 standard; DNA; 20

Porcine; totipotent cell; pluripotent; primordial germ cell; PGC; porcine stem cell factor; transgenic pig; xenotransplantation; ES; cell differentiation; gene regulation; embryonic development; pSCR; embryonic stem cell; steel factor; PCR primer; ss.

PCR primer hGH S2.1.

01-JUN-1999

AAX27716

98WO-US016782 97US-0055643P

13-AUG-1998; 14-AUG-1997;

25-FEB-1999.

WO9909141-A1

Synthetic.

(BIOT-) BIOTRANSPLANT INC.

Baetscher M;

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Brem

WPI; 1999-181024/15.

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Sequences AAX60831-864 represent synthetic oligonucleotides complementary to a cyclin-dependent kinase 4 (CDK4) nucleic acid. The antisense oligonucleotides are used to regulate G1/S phase transition, especially to inhibit growth of cancerous cells. The oligonucleotides can be administered in the form of a therapeutic composition to treat a mammal afflicted with a tumour associated with aberrant expression of CDK4,
an inducer is not required to trigger expression of the heterologous protein. This may decrease the cost of the production of the protein and simplifies the fermentation process. The new vectors are used to obtain high yields of heterologous proteins expressed in microbial host cells, especially Bscherichia coli. In particular, the new vectors are used to express the enzymes cephalosporin amidase or penicillin G amidase
                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense oligonucleotide targeted to cyclin-dependent kinase 4 gene, useful for regulating G1 to S phase transition in a cell.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDK4; antisense; G1/S phase transition; P16; tumour growth; ss.
                                                                                                                                                                                0;
                                                                                                                                             0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; tive 0; Mismatches 3; Indels
                                                                                                                Sequence 20 BP; 10 A; 2 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cyclin D1, or P16, to reduce tumour growth
                                                                                                                                                                                                                                                                                                                                                                                                                              CDX4 specific antisense oligo HYB103173
                                                                                                                                                                                                                 1433 CAGAGGATGCCATGAACAT 1452
                                                                                                                                                                                                                                             CAGAGGATATCATGAAAAT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 3; Page 17; 60pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97WO-US022234
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cyclin-dependent kinase 4; cancerous cell; cyclin D1;
                                                                                                                                                                                                                                                                                                                             20
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                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                               DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (HYBR-) HYBRIDON INC
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                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                               AAX60861 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-NOV-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
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                                                                                                                                                                                                                                                                                                           Matches
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Production of pluripotent or totipotent porcine stem cell lines - by long -term culture of transfected murine STO feeder cells with a porcine stem cell factor, useful for, e.g. xenotransplantation.

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The invention relates to an isolated porcine totipotent cell. A porcine pluripotent or totipotent cell, can be produced by culturing either a porcine primordial germ cell (PGC) or other totipotent cell with a poorcine stem cell factor (PSCF). Cell lines produced are useful for the generation of transgenic pigs, and for xenotransplantation. They are also useful for studying cell differentiation and gene regulation during embryonic development. The use of totipotent or pluripotent cells, like embryonic stem (ES) cells, in a totipotent-cell-embryo-injection-method enables specific gene alterations, which allow the study of specific gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.9%; Score 15.2; DB 1;
85.0%; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      function in a resulting chimeric animal line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                     Example 4; Page 34; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      424 ATGCGCAACCATCCCCCACG 443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 ATGCGCACCCATTCCCCAAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human FADD primer ISIS #101862.
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Best Local Similarity 85.0°
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ44825 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-APR-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAZ44825;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 335
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0

Gaps

0;

Query Match 0.9%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.8e+02; Matches 17; Conservative 0; Mismatches 3; Indels

1086 GGTGGTGACACTGTGGTACC 1105

ð d

20 GGTTGTTACACTCTGGTACC 1

RESULT 334

AAX27716

18-JAN-2000.

Zhang H;

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This invention describes novel antisense oligonucleotides (OGNs) (1) 8-20 mucleotides in length that specifically Mybridize with and inhibit nucleic acids encoding human Fas-associated death domain (FADD), targeted to the 3' untranslated region (3'UTR). (1) can be used to treat animals, especially humans, suspected of having or being prone to a disease or condition associated with FADD expression. AAZ44746-Z44831 represent primers and probes used in the method of the invention
                                                                                                                                                Antisense oligonucleotides, useful for inhibiting human Fas-associated death domain (FADD) expression are targeted to the 3' untranslated region
                                                                                                                                                                                                                                                                                                                                       0.9%; Score 15.2; DB 1; Length 20;
35.0%; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                              Claim 3; Col 69-70; 37pp; English.
                                                                                                    Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                     GGACCAGCAGTGTGACTGCT
                                99US-00357072,
                                                       99US-00357072
                                                                                                                                                                                                                                                                                                                                                82.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gene typing PCR primer #2
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Les 17; Conservative
                                                                                                    Cowsert LM,
                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UYMA-) UNIV MANITOBA
                                                                                                                           WPI; 2000-126316/11
                                                                                                                                                                        of the FADD gene.
                               19-JUL-1999;
                                                       19-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CA2299675-A1
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                                                                                                    Monia BP,
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                                                                                                                                                                                                                                                                                                                                                           Matches
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Gaps

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3; Indels

0; Mismatches

Human leukocyte antigen; HLA; gene typing; infectious disease; autoimmune disease; inflammation; cancer; PCR primer; ss. Brunham K; 65 1 GGAGTAACAGTGTGACTGCT 20 AAC68207 standard; DNA; 20 BP 10-MAR-2000; 2000CA-02299675. Brunham RC, no M,

Typing polymorphic genes, useful to assess the association of alleles with diseases and in disease diagnosis, uses a taxonomy based sequence analysis in which a typing tree based on distinguishing sequences is

WPI; 2000-679930/67

Disclosure; Page 64; 125pp; English

constructed

This invention relates to antisense compounds 8-30 mucleobases in length targeted to the 5'-untranslated region, translational start site, translational termination region or 3'-untranslated region of a nucleic translational termination region or 3'-untranslated region of a nucleic acid encoding a p38 mitogen activated protein kinase (MAPK), where the antisense oligonucleotides inhibit the expression of MAPK. Sequences AAC79480 and AAC79501 represent human p38alpha MAPK and p38beta MAPK CDNA sequences. AAC7951 AAC79510 - AAC7951 and AAC7951 - AAC79580 represent human p38alpha antisense oligonucleotides, while AAC7952 - AAC79521 and AAC79571 - AAC79580 represent human p38alpha cDNA sequence AAC79523 and antisense oligonucleotides AAC79523 - AAC79535 isolated from rat tissue. Murine p38beta MAPK CDNA is represented in AAC79537 and antisense oligonucleotides AAC79523. ö Antisense oligonucleotide, p38 mitogen activated protein kinase, MAPK, antirheumatic, antiarthritic, immunosuppressive, cardiant, heart disease, antiinflammatory, autoimmune disease, rheumatoid arthritis, apoptosis, The present invention provides a novel method for typing genes, particularly human leukocyte antigen (HLA) coding sequences. The method uses DNA sequences and a taxonomy-based sequence analysis method to assign alleles for HLA-DQAI, HLA-DQBI and HLA-DRB. These alleles have been linked to diseases such as diabetes, IgA deficiency, multiple sclerosis, cancer, clinical and immunological manifestations of HIV infection, coeliac disease, idiopathic nephrotic syndrome, immune responses to parasite antigens, pemphigus vulgaris, inflammatory bowel disease, rheumatoid arthritis, allergy and other inflammatory diseases Gaps Antisense compound targeted to p38 mitogen activated protein kinase inhibits protein kinase and is useful for diagnosing and treating inflammatory, autoimmune and heart disease. ., 0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; tive 0; Mismatches 3; Indels Popoff I; Human p38beta antisense oligonucleotide SEQ ID 29. Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other; Mckay R, 1427 TCTCCGCAGAGGATGCCATG 1446 Example 3; Page 43; 90pp; English. 1 rcrccccacacacarrcrrc 20 Nero PS, AAC79506 standard; DNA; 20 BP 04-APR-2000; 2000WO-US008794. 99US-00286904 (first entry) Ouery Match 0.9 Best Local Similarity 85.0 Matches 17; Conservative (ISIS-) ISIS PHARM INC Monia BP, Gaarde WA, phosphorothioate; ss WPI; 2000-664982/64. WO200059919-A1. 06-APR-1999; Homo sapiens 07-FEB-2001 12-OCT-2000 AAC79506; RESULT 337 AAC79506, \$\$88888888888**\$**\$ ò 

8X8888X8

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Human; globin, neuroprotective, nootropic; antiparkinsonian; antilipaemic; antiarterosclerotic; antidiabetic; dermatological; antiinflammatory; antiuloer; vulnerary; immunosuppressive; cell therapy; non-haematopoietic lineage cell; vascular disorder; arteriosclerosis; skin disorder; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New immortalized non-tumorigenic human middle ear epithelial cell line useful for studying gene and protein expression in otitis media, and for identifying chemical and biological agents for treating otitis media.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to a substantially pure cell line of immortalized non-tumorigenic human middle ear epithelial cells, which express an exogenous immortalizing gene. The cell line is useful for studying the molecular mechanisms involved in the pathogenesis that results in hearing disorders, e.g. hearing loss or otitis media. The clines are also useful for studying the normal cell piology of human middle ear epithelial cells. The cell lines can also be used as screening tool for identifying agents that may be useful in therapy
                                                                                                    Immortal cell line; middle ear epithelial; hearing disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 15.2; DB 1; Length 20;
Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 2 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 11; Page 30; 53pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1326 CAAGIACCGAGCCGAGGCCC 1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human-specific globin primer #3.
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                                                                                                                                                                                                                                                                                   26-MAY-2000; 2000WO-US014751.
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                      (first entry)
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Best Local Similarity 85.0
Matches 17, Conservative
                                                                                                                         otitis media; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                 (HOUS-) HOUSE EAR INST
                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-041148/05.
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                                                                                                                                                                                                      WO200073419-A1.
                                                                                                                                                                                                                                                                                                                             28-MAY-1999;
                                                                                                                                                              Unidentified.
                                                              Primer MUC5B
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                      15-MAR-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to the isolation of a canine Ob gene (obese gene) especially from beagle dogs. The gene is isolated from a dog DNA library using primers ABZ80676-ABZ80690. This sequene represents a PCR primer used to isolates the gene encoding the Ob protein. The invention also includes a vector comprising the DNA and a host cell transformed with the vector. The sequence is used for the large scale preparation of canine
                                                                rheumatoid
immunosuppressive, cardiant and antiinflammatory activity. The antisense oligonucleotides are useful for inhibiting the expression of p38 MAPK in cells or tissues. The oligonucleotides are used for treating an animal with diseases such as inflammatory or autoimmune diseases e.g. rheumatoid arthitis, or heart disease. The oligonucleotides are also useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A canine obese gene, its gene product, its preparation, its measuring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ss; dog; canine; obese gene; leptin; PCR; primer; amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
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                                                                                                                                                                                 0.9%; Score 15.2; DB 1; Length 20; 35.0%; Pred. No. 5.8e+02; Ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Beagle dog ob gene PCR amplification primer OBREV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                              Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                     arthritis, or heart disease. The olig
inhibiting inflammation or apoptosis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 8; 18pp; Japanese
                                                                                                                                                                                                                                                                   764 TGCTCAAGGACCTCAAACAC 783
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                                                                                                                                                                                                                                                                                                AAC91033 standard; DNA; 20 BP
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                                                                                                                                                                                                          Best Local Similarity 85.0
Matches 17; Conservative
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RESULT 33
ABZ80677/
ID ABZ8
XX ABZ8
XX ABZ8
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XX BS;

RESULT 339

AAC91033/ ID AAC9 XX AC AAC9

Matches

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The present sequence is a PCR primer which was used to amplify human can an example illustrating an invention relating to a method for obtaining non-haematopoietic lineage cells from haematopoietic progenitor cells (HPCs). The non-hematopoietic lineage cells are useful corrected in the therapeutic treatment of various pathological conditions such as tissue repair, tissue transplantation and tissue reimplementation. They are useful for treating neurodegenerative disorders such as Alzheimer's disease, multiple sclerosis and Parkinson's disease, and vascular disorders such as arteriosclerosis, coronary artery disease, aortic aneurysm and arterial diseases of the lower extremities. The cells may be used in the treatment of other diseases associated with early also be used to treat disorders mellitus, hypertension, familial compined hyperlipidaemia. They may also be used to treat disorders of the skin, such as escema and transplanted mice. PCR specific for human globin was performed with brain and muscle cells of the transplanted and nontransplanted mice. A PCR product was detected only in the brain cells, indicating that the human cells were only present in the brain.
                                                                                                                                                                                              Producing non-hematopoietic lineage cells from hematopoietic progenitor cells for use in tissue repair, transplantation, involves culturing the progenitor cells under environment that promotes cell differentiation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human MEKK1; mitogen-activated protein kinase kinase l;
MEK kinase 1; MAP/ERK kinase kinase 1; pro-apoptotic;
apoptosis signal regulation; programmed cell death;
serine/threonine kinase; MAP kinase cascade, JNK/SAPK;
Jun N-terminal kinase/stress-activated protein kinase; Bcl-2 substrate;
NF-kappa-B-mediated transcription regulation; expression inhibition;
antisense; hyperproliferative disorder; cancer; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human MEKKI phosphorothioate antisense oligonucleotide, SEQ ID NO:8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%; Score 15.2; DB 1; Length 20; 35.0%; Pred. No. 5.8e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
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                                                                                                                     Pykett MJ, Rosenzweig M, Banu N;
                                                                                                                                                                                                                                                                                Example 2; Page 32; 42pp; English
                                                                             (CELL-) CELL SCI THERAPEUTICS.
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                23-SEP-1999; 99US-0156031P.
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les 17; Conservative
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                                                                                                                                                          WPI; 2001-281603/29.
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Sequences AAF271056-AAF27125 represent phosphorothioate antisense oligonucleotides targetted to the human MEKKI gene, which inhibit its capression. The antisense oligonucleotides were designed to target confiderent regions of the human MEKKI RNA, and were analysed for their different regions of the human MEKKI RNA, and were analysed for their ceffect on MEKKI mRNA levels by quantitative real-time PCR. MEKKI (also Known as mitogen-activated protein kinase kinase lime KKI RNA see kinase lime as mitogenerates callular responses to mitogenic stimuli, being involved in JNK/SAPK (Jun N-terminal kinase/stress-activated protein kinase) MAP capptosis (programmed cell death) and NF-kappa-B, both of which have been associated with the development of hyperproliferative disorders such as cancer. Specifically, MEKKI lies directly downstream of Bcl-2 in an apoptotic signalling cascade, and plays a critical role in the control of CNF-kappa-B-mediated transcription at multiple points in the apoptotic cascade. The oligonucleotides of the invention are useful for diagnosis, conversely and creatment of conditions associated with MEKKI expression, control of conditions as ssociated with MEKKI expression, control of cascade. The oligonucleotides of the invention are useful for diagnosis, control of conditions as ssociated with MEKKI expression, control or conditions as ssociated with mEKKI expression, control conditions as sociated with capped and conditions 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                              New antisense compound targeting nucleic acid encoding human mitogenactivated protein kinase kinase 1 (MEKK1), useful for treating diseases or conditions associated with MEKK1 expression, or preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    such as inflammation, and cancer and other hyperproliferative disorders
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Herl; antisense; prophylaxis; psoriasis; phosphorothioate backbone;
tumour; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
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/note= "2'methoxyethyl nucleotides"
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/note= "Phosphorothioate backbone"
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                                                                                                                                                                                                                                            Gaarde W,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          inflammation or tumor formation.
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99US-00359756.
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                                                                                                                                                         (ISIS-) ISIS PHARM INC
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Best Local Similarity
Matches 17; Conserv
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23-JUL-1999;
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Making hypermutable cell for agricultural, pharmaceutical or environmental applications, by exposing cell to mismatch repair inhibitor such as anthracene, ATPase inhibitor, nuclease inhibitor or polymerase
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                                                                                                                          15-JAN-2001; 2001WO-US000934.
                                                                                                                                                   15-JAN-2001; 2001WO-US000934.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to an antisense oligonucleotide targetted to a nucleic acid molecule encoding human epidermal growth factor receptor (Herl) to inhibit its expression. The antisense compounds are useful for treating diseases or conditions associated with Her-1 such as hyperproliferative diseases especially cancer (lung, ovarian, colon or prostrate cancer, and psoriaeis. They are also useful as research reagents, diagnostics, therapeutics, kits and prophylactically e.g. to prevent or delay tumour formation. The present sequence is an antisense oligonucleotide targetted to human Her-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel antisense oligonucleotide that specifically hybridizes with and inhibits nucleic acid encoding epidermal growth factor receptor, useful for treating hyperproliferative disease such as cancer or psoriasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Plant; mismatch repair; chemical inhibitor; hypermutable; PCR; primer;
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conservative 0; Mismart.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chimeric beta-glucuronidase enzyme PCR primer SEQ ID NO: 40.
                                                                                                                                                                                                                                         /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
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                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 47; 169pp; English
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/mod_base= m5c
                                                                                                                                                                                               /mod_base= m5c
16. .20
                              'mod base= m5c
                                                                       m5c
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                 *tag=
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Les 17; Conserv
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Matches
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                                                                The present invention relates to a method of making a hypermutable cell, involving exposing a cell to a chemical inhibitor of mismatch repair. The method is useful for making a hypermutable cell, in particular a plant cell, and for creating genetically altered host cells or organisms for agricultural, chemical manufacturing, pharmaceutical and environmental applications. The present sequence is a PCR primer used to sequence a chimeric beta-glucuronidase reporter enzyme coding sequence for use in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; calreticulin; antisense compound; hyperproliferative disorder; cancer; autoimmune disease; viral infection; cardiovascular disease; antisense therapy; cytostatic; immunosuppressive; virucide; antisense; phosphorothioate backbone; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human calreticulin antisense oligonucleotide, ISIS 109313.
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/*tag= b
/mod base= OTHER
/note= "2'methoxyethyl nucleotides"
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                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other
                                                                                                                                                                                                                                                                                                                                       the exemplification of the invention
Example 6; Page 111; 114pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
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MAXEXEXEX AXX

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04-SEP-2001; 2001WO-US027404 06-SEP-2000; 2000US-0230371P. 04-SEP-2001; 2001US-00230371.

(HODG/) HODGE T A.

Hodge TA;

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The invention relates to antisense compounds, compositions and methods antisense compounds, particularly antisense oligonucleotides, targetted to mucleic acids encoding calreticulin. The antisense compound is useful for inhibiting the expression of calreticulin in human calls or tissues. It is also useful for treating a human having a disease or condition associated with calreticulin, e.g., hyperproliferative disorder e.g. cancer, autoimmune disease, viral infection or cardiovascular disease, by therapeutics, prophylaxis and as research reagents and kits. It is also therapeutics, prophylaxis and as research reagents and kits. It is also targetted to human calreticulin. This sequence is an antisense compound targetted to human calreticulin. This sequence is used to study the antisense inhibition of calreticulin expression-phosphorothioate 2'-MOE
                                                                                                                                                                                                                                                                                                                                                                                                   Novel antisense compound targeted to nucleic acid encoding calreticulin, useful for treating a human having disease or condition associated with calreticulin e.g. cancer, viral infection, autoimmune disease.
                                  /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 7 A; 1 C; 7 G; 5 T; 0 U; 0 Other;
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                                                                                      /*tag= d
/mod_base= m5c
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                      U
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                    *tag=
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                                                                                                                                           WO200236743-A2
modified base
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                                                 Gaps
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/ Match 0.9%; Score 15.2; DB 1; Length 20; Local Similarity 85.0%; Pred. No. 5.8e+02; les 17; Conservative 0; Mismatches 3; Indels
                                                                                            540 CATCTTTGACAAGCCCCTCA 559
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CATCTTGACAACTTCCTCA 1 20 ò g

ABK50599 standard; DNA; 20 BP 30-JUL-2002 RESULT 345 ABK50599/

Method for screening genomic DNA; target sequence; transgenic screening; organism identification; targeted mutagenesis screening method; mouse; probe; ss

14-MAR-2002

(first entry) FAM modified probe #4. WO200220842-A1. Mus sp 

The present invention relates to a method and apparatus for transgenic and targeted mutagenesis screening of genomic DNA. The method comprises depositing genomic DNA on a substrate, adding at least one labelled probe specific for a portion of the genomic DNA, and detecting the signal from the probe. The invention also provides a system for screening DNA for a processor, memory, web browser and an automatic screening device that analyses samples of genomic DNA for the designated sequence. The method is useful for detecting a designated genetic sequence in a sample of genomic DNA. The method is useful for rapid identification of an organism, whose genome possesses specific genetic sequences that exist endogenously or has been modified, mutated or genetically engineered. The method is more accurate, faster and is a high volume transgenic and targeted mutagenesis screening method. The screening results are provided to a researcher more quickly than by the prior art methods. The present ·. Detecting designated genetic sequence in genomic DNA sample, comprises depositing genomic DNA on substrate, adding labeled probe specific for portion of DNA and detecting signal from labeled probe. Gaps .; 0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; tive 0; Mismatches 3; Indels Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other; Example 4; Page 62; 126pp; English. Best Local Similarity 85.0 Matches 17; Conservative WPI; 2002-371884/40. present invention depositing c portion of I Query Match 

1593 CGTGGTGGACACCGAGTTCT 1612 20 CGTGGTGCACACCGTGTTAT 1 ò

ABK50568 standard; DNA; 20 BP Mouse genomic DNA marker #4. (first entry) 30-JUL-2002 ABK50568; RESULT 346 ABK50568, A X X B X B X X B

Method for screening genomic DNA; target sequence; transgenic screening; organism identification; targeted mutagenesis screening method; mouse; organism ident: DNA marker; ds

Wus sp

14-MAR-2002

WO200220842-A1.

04-SEP-2001; 2001WO-US027404.

06-SEP-2000; 2000US-0230371P.

(HODG/) HODGE T A.

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Gaps

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Indels

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Query Match
                          ABS68931
Hodge TA;
                       Matches
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cytostatic, cardiant, virucide, osteopathic, and antiparasitic activity, and may act as a calreticulin-inhibitor, and have a use in antisense gene therapy. The antisense compound is useful for treating a disease or condition associated with calreticulin e.g. melanoma, viral warts, rubella, schistosomiasis, congenital heart block or osteoporosis. Further, it is useful as prophylaxis, research reagent and diagnostic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hybridizes with and inhibits the for treating diseases e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nucleotides in length targeted to a nucleic acid molecule encoding human calreticulin, and specifically hybridises with and inhibits the expression of human calreticulin. A compound of the invention has
                                                                                    Reco protein-like 4 (RECQL4) and which hybridises and inhibits the expression of RECQL4. The compound is useful for inhibiting the expression of RECQL4. The compound is useful for inhibiting the particularly a human suspected of having or being prone to a disease or condition associated with expression of RECQL4. The compound is useful prophylactically to prevent or delay infection, inflammation or tumour formation. This sequence represents an antisense oligonucleotide used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ss; human; antisense compound; calreticulin; cytostatic; cardiant; virucide; osteopathic; antiparasitic; antisense gene therapy; melanoma; viral warts; rubella; schistosomiasis; congenital heart block; osteoporosis.
                                                               The invention relates to a compound targeted to specific nucleobases of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Phosphorothioate oligonucleotide calreticulin inhibitor SEQ ID NO:54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a novel antisense compound, which is 8-10
                                                                                                                                                                                                                                                                                                                                                                                                Score 15.2; DB 1; Length 20; Pred. No. 5.8e+02;
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                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense compound that specifically expression of human calreticulin, useful osteoporosis or schistosomiasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; SEQ ID NO 54; 110pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
(BOEH ) BOEHRINGER INGELHEIM PHARM INC.
                                                                                                                                                                                                                                                                                                      inhibition of human RECQL4 expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1160 GGGGTGTGGCTGCTTC 1179
                     Claim 14; Col 46; 45pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 descreteseccecearers 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          17; Conservative
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Best Local Similarity
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                           The present invention relates to a method and apparatus for transgenic and targeted mutagenesis screening of genomic DNA. The method comprises depositing genomic DNA on a substrate, adding at least one labelled probe specific for a portion of the genomic DNA, and detecting the signal from the probe. The invention of the genomic DNA, and detecting the signal from the probe. The invention also provides a system for screening DNA for a processor, memory, web browser and an automatic screening device that a processor, memory, web browser and an automatic screening device that canalyses samples of genomic DNA for the designated sequence. The method is useful for detecting a designated genetic sequence. The method is useful for rapid identification of an organism, whose genome possesses specific genetic sequences that exist endogenously or has been modified, mutated or genetically engineered. The method is more accurate, faster and is a high volume transgenic and method is more guickly than by the prior art methods. The present cargenence represents a mouse genomic DNA marker used in the methods of the
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like 4, useful for modulating expression of the nucleic acid and treating
diseases associated with expression of the nucleic acid in humans.
                                                                                                                            Detecting designated genetic sequence in genomic DNA sample, comprises depositing genomic DNA on substrate, adding labeled probe specific for portion of DNA and detecting signal from labeled probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; RecQ protein-like 4; RECQL4; ss; chromosome 8q24; infection; inflammation; tumour formation; cancer; cytostatic; antiinflammatory; antimicrobial; antisense therapy; antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human RecQ protein-like 4 (RECQL4) DNA antisense oligonucleotide #74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                      Claim 9; Page 41; 126pp; English
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                                                                               WPI; 2002-371884/40.
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0.9%; Score 15.2; DB 1; Length 20;
Query Match
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Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

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85.0%;
                                     Conservative
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         Best Local Similarity
Matches 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                               ABZ59542;
                                                                                                                                                                                                   RESULT 350
                                                                                                                                                                                                                            ABZ59542/
                                                                                 ð
                                                                                                                           g
                                                                                                                                                                                                 ö
The present sequence is used in the exemplification of the invention. The sequence is a phosphorothioate oligonucleotide, having 2'-MOE wings and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "phosphorothioate backbone, nucleotides 1-6 and 15 -20 are 2'-methoxyethoxy (MOE) nucleotides, nucleotides 7 -14 are 2'-deoxy- nucleotides, all C nucleotides are 5-methyl cytosines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense compound, useful for preparing a composition for diagnosing, treating or preventing inflammatory diseases, e.g. rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleobases in length targeted to a nucleic acid molecule encoding p38 mitogen-activated protein kinase (MAPK). The products of the invention have antiarthritic and antiinflammatory activity, can act as act as kinase inhibitors. The antisense compound is useful for preparing a composation for diagnosing, treating or preventing inflammatory diseases, e.g. rheumatoid arthritis or for use in antisense gene therapy. This sequence represents an antisense oligonucleotide used in a method to
                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                p38 mitogen-activated protein kinase; p38 MAPK; phosphorothioate; antisense; antiarthritic; antiinflammatory; kinase inhibitor; human; inflammatory disease; rheumatoid arthritis; gene therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention describes a novel antisense compound, which is 8-30
                                                                                                                                                                                                 .
0
                                                                                                                                                  Length 20;
                                                                                                                                                                                            3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human p38-beta MAPK oligonucleotide ISIS NO 17895.
                                                                                              Sequence 20 BP; 7 A; 1 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                          Score 15.2; DB 1;
Pred. No. 5.8e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mckay R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 3; Col 23-24; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                        540 CATCTTTGACAAGCCCCTCA 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER
                                                                                                                                                                                                                                                                           20 CATCTTTGACAACTTCCTCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Д,
                                                                                                                                                                                                                                                                                                                                                                                                            ABX78105 standard; DNA; 20 BP
                                                                                                                                        0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-00640101.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-00286904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nero
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= a
/mod_base=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                         17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1, .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaarde WA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-089122/08
                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        inhibit p38 MAPK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US6448079-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-SEP-2002
                                                      deoxy gap.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Monia BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABX78105;
                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                             RESULT 349
ABX78105/c
                                                                                                                                                                                            Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides targeted to nucleic acids encoding src-c, useful for diagnosing, treating or preventing diseases associated with the expression of src-c, e.g. cancer or inflammation, and in research
                  Gaps
                                                                                                                                                                                                                                                                                        Mouse, src-c, tyrosine kinase, src-c inhibitor; cytostatic; osteopati antiinflammatory; antibacterial; antisense therapy; vaccine; cancer; antisense oligonucleotide; aberrant bone remodeling; breast cancer; hyperproliferative disorder; pancreatic cancer; lung cancer; tumour; ovarian cancer; oesophageal cancer; neuroblastoma; retinoblastoma; Kaposi's sarcoma; infection; inflammation; tumour formation;
                                                                                                                                                                                                                                                             Mouse src-c chimeric phosphorothioate oligonucleotide SEQ ID NO:163.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'note = "2'-O-methoxyethyl gapmer (2'-MOE wing)"
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "2'-0-methoxyethyl gapmer (2'-MOE wing)"
               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'note= "phosphorothioate linkages"
Pred. No. 5.8e+02;
; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             location/Qualifiers
                                               783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           l. .5
/*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 3; Page 93; 137pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mod_base= OTHER
                                                                            20 recreasecacereasecae 1
               0;
                                               764 TGCTCAAGGACCTCAAACAC
                                                                                                                                                              ABZ59542 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-MAY-2001; 2001US-00860473.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-MAY-2002; 2002WO-US015684
                                                                                                                                                                                                                           17-APR-2003 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New human tweery homolog 2 polypeptides and polynucleotides, useful for producing an antigen-binding molecule that is immuno-interactive with the polypeptide or as diagnostic markers for cancers.
particularly cancer, such as breast cancer, pancreatic cancer, lung cancer, osophageal cancer, neuroblastoma, retinoblastoma or Kaposi's sarcoma. (I) are also useful for diagnostics, therapeutics, prophylaxis, e.g. to prevent or delay infection, inflammation or tumour formation, as research reagents and kits, and in distinguishing between functions of various members of a biological pathway. The present sequence represents a mouse str-c antisense chimeric phosphorothioate oligonucleotide, which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; tweety homologue 2; TTYH2; therapy; cancer; tumour; cytostatic;
diagnostic marker; PCR; primer; ss.
                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                          Score 15.2; DB 1; Length 20; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human TTYH2 intron C amplifying reverse PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                        Sequence 20 BP; 6 A; 8 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 4; Page 92; 176pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (UYQU-) UNIV QUEENSLAND TECHNOLOGY
                                                                                                                                                                                                                                                                                                  1028 TGGCTGACTTTGGCCTGGCC 1047
                                                                                                                                                                                                                                                                                                                                  20 resceatrification
                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-MAY-2001; 2001AU-00004971.
                                                                                                                                                                                                                            0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                             AAD52909 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                             Local Similarity 85.0 es 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200292629-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Clements JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAD52909;
                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                  Matches
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The present invention relates to a method of quantifying in vivo RNA from a biological sample. This involves collecting the biological sample in a tube comprising a compound inhibiting RNA degradation and/or gene induction, forming a precipitate comprising nucleic acids, separating the precipitate from the supernatant, dissolving the precipitate using a buffer, forming a suspension, isolating nucleic acids from the suspension using an automated device, dispersing or distributing a reagent mix for reverse transcription (RY)-PCR using an automated device and determining the in vivo levels of transcripts using the nucleic acids isolated within the dispersed reagent mix cusing an automated device and determining the in vivo levels of the previous step in an automated setup. The method is useful for monitoring or detecting changes in in vivo nucleic acids levels in a biological agent present, such as eukaryotic or prokaryotic cells, viruses or phages in a biological sample or for producing a medicament for treating immune transcripts. "The contracting immune the contracting artificial mitigal and producing a present, is a untilingle or producing a medicament for treating immune transcripts." "The contracting immune or contracting artificial acids artificial artificial acids artifici
                                                                                                                                                                                                                                                                                                                                                                               Nucleic acid level determination; PCR; primer; probe; DNA quantification; gene therapy; immunosuppressive; anti-HIV; antiarthritic; neuroprotective; cytostatic; antiallergic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sclerosis, cancer, immunodeficiencies such as AIDS, allergy, graft rejection or Graft versus Host Disease. The present sequence is a Fprimer/probe used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Quantifying in vivo RNA from a biological sample for producing a medicament for treating immune related disease by determining in vilevels of transcripts using nucleic acid/reverse transcription-PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 1 A; 9 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                  Real time PCR targeting IL-1ra PCR primer F43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 44; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       713 GACTGGAACATGAAGAGGGG 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          setup
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20 GGACCTAGAGCAGCACCTGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-JAN-2003; 2003WO-EP000493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-JAN-2002; 2002EP-00447009.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ULBR ) UNIV LIBRE BRUXELLES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     reagent mix in an automated
                                                                                                                                                                      ACF04494 standard; DNA; 20
                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goldman M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-598531/56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
nes 17; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003060119-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unidentified
                                                                                                                                                                                                                                                                                  04-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stordeur P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                            ACF04494;
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Matches
                                                                                                                   RESULT 352
                                                                                                                                                ACF04494/
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RESULT 353

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Gaps ö

3; Indels

0; Mismatches

Score 15.2; DB 1; Length 20; Pred. No. 5.8e+02;

.98; 85.0%;

Query Match 0.9 Best Local Similarity 85.0 Matches 17; Conservative

ö

ADD19339 standard; DNA; 20 BP.

RESULT 354

ADD19339/

ADD19339

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/note= "OTHER= Nucleotides 1-5 and 15-20 are 2'-0-methoxyethyl's (2-MOB)'s separated by a gap region of 2'-deoxynucleotides. Nucleotides 1-20 have a phosphorothioate backbone. All cytidine residues are 5-methylcytidines"
                                                                                              antisense; modulating; expression; matrix metalloproteinase 1; MMP1; hyperproliferative disorder; cancer; inflammatory disorder; attherosclerosis; MMP1 inhibitor; cytostatic; antiinflammatory; antiarteriosclerotic; ss; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding matrix metalloproteinase 1 (MMP1), useful for treating a disease/condition associated with MMP1, such as
                                                                          Matrix metalloproteinase 1 antisense oligonucleotide, SEQ ID No 60
                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 3; Page 74; 99pp; English.
         ADB79146 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                17-OCT-2001; 2001US-00035485.
                                                                                                                                                                                                                                                                                                                                          15-OCT-2002; 2002WO-US032940,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hyperproliferative disorder.
                                                     (first entry)
                                                                                                                                                                                               1. .20
/*tag= a
/mod_base
                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                           Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-393515/37.
                                                                                                                                                                                                                                                                                               WO2003033659-A2
                                                                                                                                                                                    Key
modified_base
                                                                                                                                                                Homo sapiens
                                                    04-DEC-2003
                                                                                                                                                                                                                                                                                                                     24-APR-2003
                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                           Baker BF,
                                ADB79146;
ADB79146/c
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The invention relates to antisense compounds, compositions and methods used for modulating the expression of matrix metalloproteinase 1 (MMP1). Specifically claimed, are antisense oligonucleotides capable of modulating the expression of MMP1, and which comprise any of the 55 sequences of 20 bp, fully defined in the specification. The compound, composition and methods are useful for treating a disease or condition associated with MMP1, such as hyperproliferative disorder, e.g. cancer, inflammatory disorder or atherosclerosis, by inhibiting the expression of MMP1. They are also useful in research and diagnostics for modulating the expression of MMP1. They are also useful in research and diagnostics for modulating the axpression of MMP1. The antisense compounds can act as MMP1 inhibitors and have the following activities: cycostatic. antichlammatory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and have the following activities: cytostatic, antiinflammatory, and antiarteriosclerotic. This polynucleotide sequence represents one of the antisense compounds used for modulating the expression of matrix
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 metalloproteinase 1 of the invention.
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;
                                                                     Gaps
                                                                     0;
                                0.9%; Score 15.2; DB 1; Length 20;
35.0%; Pred. No. 5.8e+02;
.ve 0; Mismatches 3; Indels
Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                 962 AGAAGGIGCIACACCGAGAC 981
                                                82.0%;
                                                                17; Conservative
                                               Similarity
                                Query Match
Best Local S
                                                                Matches
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AGAATGTGCTACACGGATAC 1

20

07-AUG-2001; 2001JP-00239331. (MITU ) MITSUBISHI CHEM CORP

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Novel feline leptin polypeptide encoded by a feline ob gene which is related to obesity in cats, useful for diagnosing and treating obesity.
                                                                                                                                                                                                                                                                                                                                                         The invention comprises the amino acid and coding sequences of feline leptin proteins. The DNA and protein sequences of the invention are useful for screening for a compound which inhibits the activity of leptin. The DNA and protein sequences of the are also useful for diagnosing and treating obseity. The present DNA sequence represents PCR primer that was used in an example of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                           feline; cat; leptin; leptin inhibitor; obesity; PCR; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCR primer #2 used to illustrate microorganism breeding method.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                 Example; SEQ ID NO 6; 18pp; Japanese.
                                                    Leptin gene-specific PCR primer #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1075 TACTCCAATGAGGTGGTGAC 1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 TACTCCACAGAGGTGGTGGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Microorganism; PCR; primer; ss.
                                                                                                                                                                                    31-JUL-2001; 2001JP-00230711
                                                                                                                                                                                                            31-JUL-2001; 2001JP-00230711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-AUG-2001; 2001JP-00239331.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADE71316 standard; DNA; 20
                          15-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-JAN-2004 (first entry)
                                                                                                                                                                                                                                      (MOMI ) MORINAGA & CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 85.09
Marches 17; Conservative
                                                                                                                                                                                                                                                                WPI; 2003-527653/50.
                                                                                                                                JP2003038187-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JP2003047477-A.
                                                                                                      Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADE71316;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 355
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human; single nucleotide polymorphism; microarray; side effect; ss;
                                                                                                                                                                                                                                                                                                         Single nucleotide polymorphism detection primer, SEQ ID No 1712
                                                                                                                                                      Ouery Match 0.9%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.8e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                       Sequence 20 BP; 4 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 2; SEQ ID NO 1712; 704pp; Japanese.
                                                           Example 3; SEQ ID NO 2; 20pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                    (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN
                                                                                                                                                                                           1464 CAGTCTGGGGGAGCGGATCC 1483
                                                                                                                      in an example from the invention.
                                                                                                                                                                                                           20 cagreragecearedearec 1
                                                                                                                                                                                                                                                                                                                                                                                                                  12-FEB-2002; 2002JP-00034717
                                                                                                                                                                                                                                                                                                                                                                                                                                   12-FEB-2002; 2002JP-00034717
                                                                                                                                                                                                                                                :129/c
ADF88129 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-820454/77
      WPI; 2003-508704/48
                                                                                                                                                                                                                                                                                                                                                                                JP2003235571-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                in human gene.
                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                          26-FEB-2004
                                                                                                                                                                                                                                                                                                                                      primer; PCR
                                                                                                                                                                                                                                                                                                                                                                                                 26-AUG-2003
                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                         ADF88129;
                                                                                                                                                                                                                                       RESULT 356
ADF88129/c
g
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BP.

20

(first entry)

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The invention comprises isolated human gene sequences and PCR primer sequences which can be used to detect single nucleotide polymorphisms (SNPs). The DNA sequences of the invention are useful for detecting SNPs existing in human genes and for the diagnosis of human disease. The present DNA sequence represents a human gene PCR primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Polynucleotide for detecting single nucleotide polymorphisms existing in human gene, contains isolated human gene having specified sequence.
                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Acyl CoA cholesterol acyltransferase-2 antisense oligo ISIS #143028.
one of the PCR primers used in the single nucleotide polymorphism detection method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·.
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                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 single nucleotide polymorphism; SNP;
                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other
                                                                   Seguence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other
                                                                                                             Score 15.2; DB 1;
Pred. No. 5.8e+02;
0; Mismatches 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   human; gene sequence; single nuclec
disease diagnosis; ss; PCR; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    135 GAAGAAGATCAAACGGCAGC 154
                                                                                                                                                                                                              873 CCTGGATGACTGTGGGAACA 892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAAGATGAACAAACGGCTGC 1
                                                                                                                                                                                                                                                            20 ccredarcacrrreceaaca 1
                                                                                                                                                                                                                                                                                                                                                                              BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-DEC-2001; 2001JP-00377637
                                                                                                                 Query Match 0.9%;
Best Local Similarity 85.0%;
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                              ADH93272 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human gene PCR primer #117
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                            ADH93272;
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Matches
                                                                                                                                                                                                                                                                                                                                RESULT 357
                                                                                                                                                                                                                                                                                                                                                          ADH93272/
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                                                                        Breeding microorganism cell whose host character is changed by expression of introduced insertion sequence, by introducing the sequence into the genome and is transformed using DNA which has the insertion sequence.
                                                                                                                                                                                                              The present invention relates to a method (MI) for breeding microorganism cells whose host character is changed by the expression of the introduced insertion sequence. The method involves introducing the insertion sequence into the genome and is transformed using DNA which has the insertion sequence. The present sequence is a PCR primer, which was used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel polynucleotide useful for detecting single nucleotide polymorphisms
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(MCKA/) MCKAY R.
                                                                                                                                                                                                             US2003176383-A1
                                    Key
modified_base
                                                                                                        modified base
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               Homo sapiens
                                                                                                                                                                                                                                    18-SEP-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      disease
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                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to novel antisense oligonucleotides which are targeted to human acyl COA cholesterol acyltransferase-2 (ACAT-2) nucleotide sequence (ACC42409-ACC42411), and mouse ACAT-2 (ACC42432-ACC42457). The antisense oligonucleotides specifically hybridise with and inhibit the expression of ACAT-2 nucleotide sequences (ACC42395 and ACC42402). ACAT enzymes catalyse the synthesis of cholesterol esters from tree cholesterol and fatty acyl-CoA. The antisense oligonucleotides are useful for treating an animal which has a disease or condition associated with ACAT-2, e.g. a condition involving abnormal lipid metabolism, a condition involving abnormal lipid metabolism, atherosclerosis, or
                                                                                                               /mod_base= OTHER
hote= "Oligonuclectide has phosphorothicate backbone and
all cytidine nucleotides are 5-methylcytidine. Optionally
some nucleotides with 2'-methoxyethyl (2'-MOE wings)
Acyl CoA cholesterol acyltransferase-2; antisense therapy; antilipemic; antiarteriosclerotic; cardiovascular; ACAT-2; lipid metabolism; cardiovascular disease;
                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides for modulating acyl CoA cholesterol acyltransferase-2, e.g. for preventing or treating diseases associated with abnormal lipid or cholesterol metabolism, atherosclerosis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antisense; p38 mitogen activated protein kinase; p38 MAPK;
inflammatory disease; autoimmune disease; rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 3 A; 10 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human p38 MAPK antisense oligonucleotide #25.
                                                                                                                                                                                                                                                                                                    Lemonidis KM
                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GIGGCCIGGCCIACIGCCAC 957
                                                                                                                                                                                                                                                                                                                                                                                                     Claim 3; Page 90; 112pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGGCCTGGCCCACAGCCAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВР
                                                                                                                                                            modification
                                                                                                                                                                                                                                L5-JUL-2002; 2002WO-US022746
                                                                                                                                                                                                                                                      30-JUL-2001; 2001US-00918026.
                                 phosphorothioate; mouse; ss
                                                                                           ...20
*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADM34241 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 heart disease; ss; human.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                 Graham MJ,
                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                               cardiovascular disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cardiovascular disease
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17; Conserv
                                                                                                                                                                                   WO2003011889-A2
                                                                               Key
modified base
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                                                                                                                                                                                                           13-FEB-2003
                                                                                                                                                                                                                                                                                                   Crooke RM,
                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADM34241;
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Best Local S
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                                                                                                                         /note= "Phosphorothioate linkages. All cytosines are 5-
methyl cytosines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonuclectides for modulating p38 mitogen activated protein kinase (MAPK) expression, useful for diagnosing, preventing or treating diseases associated with p38 MAPK, e.g. inflammation or heart
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                                                                                                                                                                                                                                                                                                                                                                                                         /note= "2'-methoxyethoxy nucleotides"
                                                                                                                                                                                                                                                                            'note= "2'-methoxyethoxy nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 3; SEQ ID NO 29; 48pp; English.
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Location/Qualifiers
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                                                                                            mod_base= Other
                                                                                                                                                                                                                                                   'mod base= Other
                                                                                                                                                                                                                                                                                                                                                                         Other
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nero P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADG46789 standard; DNA; 20 BP
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15-AUG-2000; 2000US-00640101.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-SEP-2002; 2002US-00238442
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/mod_base=
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                                                            *tag= b
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nes 17; Conservative
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*tag=
                                                                                                                                                                                                                                                                                                         16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaarde WA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-898587/82.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MONI/) MONIA B P.
(GAAR/) GAARDE W A.
(NERO/) NERO P.
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The present invention relates to antisense compounds targeted to a nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6 (GRK6). The antisense compound comprises an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits the expression of GRK6. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense oligonucleotide is a chimeric oligonucleotide. The inkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2-methoxyethyl (2-MDE) sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-metholycosine. The antisense oligonucleotides are useful for the treatment of diseases such as rheumatoid arthritis, drug addiction, uterine contractility, more tension, and diseases or conditions arising from aberrant
                                                                                                                                                                                                                                                                                                                                                                                                                                   New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6, useful for treating diabetes, drug addiction, uterine contractility and
/note= "This oligonucleotide has a phosphorothioate backbone and 2'-methyoxyethyl (2'-MGB) wings at the 5' and 3' ends, which are 5 nucleotides in length at each end. All cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antisense therapy; human; G protein-coupled receptor kinase 6; GPCR kinase 6; GRK6; rheumatoid arthritis; drug addiction; uterine contractility; hypertension; aberrant haematopoiesis; antiinflammatory; antiintlin; antirheumatic; hypotensive; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        haematopoiesis. The present sequence represents an antisense oligonucleotide used in the examples of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.9%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.8e+02; Matches 17; Conservative 0; Mismatches 3; Indels
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                                                                                                                                                                                                              31-MAY-2002; 2002US-00159856.
                                                                                                                                                                                                                                                           31-MAY-2002; 2002US-00159856.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                      Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-052027/05.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hypertension
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                                                                                                                                                                   11-DEC-2003
                                                                                                                                                                                                                                                                                                                                                      Freier SM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Making hypermutable cell by exposing cell to inhibitor of mismatch repair e.g. an anthracene, an ATPase inhibitor, a nuclease inhibitor or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a method for making a hypermutable cell. The method comprises exposing a cell to an inhibitor of mismatch repair, where the inhibitor is an anthracene, an AFPase inhibitor, a nuclease inhibitor, a polymerase inhibitor, or an antisense oligonucleotide that specifically hybridises to a nucleotide encoding a mismatch repair protein. The method further involves: testing the animal or plant to determine whether the gene of interest comprises a mutation. The method is useful for making a hypermutable cell. The present sequence is a PCR primer used for sequencing GUS (beta-glucoronidase) cDNA.
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                                                                                                  Hypermutable cell; mismatch repair; MMR protein; primer; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; Live 0; Mismatches 3; Indels
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                                                       GUS cDNA sequencing PCR primer, GUS-1033R.
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         11-MAR-2004 (first entry)
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Best Local Similarity 85.0
Matches 17; Conservative
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/*tag=
                                                                                                                                                                                                                                                                                                                                                                          (GRAS/) GRASSO L.
(SASS/) SASS P M.
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polymerase inhibitor.
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                                                                                                                                               Unidentified
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                                                                                                                                                                                         New compounds, particularly antisense oligonucleotides targeted to a
nucleic acid encoding G protein-coupled receptor (GPCR) kinase 6, useful
for treating diabetes, drug addiction, uterine contractility and
hypertension.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           one modified nucleobase, preferably a 5-methyloytosine. The antisense oligonucleotides are useful for the treatment of diseases such as rheumatoid arthritis, drug addiction, uterine contractility, hypertension, and diseases or conditions arising from aberrant haematopoiesis. The present sequence represents a human GRK6 DNA target sequence for an antisense oligonucleotide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ss; junctional adhesion molecule 3; JAM 3; autoimmune disorder; multiple sclerosis; organ rejection; inflammation; human; antisense.
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85.0%; Pred. No. 5.8e+02;
tive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 1 A; 5 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                              Example 15; SEQ ID NO 123; 58pp; English.
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                                                   31-MAY-2002; 2002US-00159856.
                31-MAY-2002; 2002US-00159856.
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nes 17; Conservative
                                                                                  (ISIS-) ISIS PHARM INC
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                                                                                                                       Freier SM, Dobie KW;
                                                                                                                                                        WPI; 2004-052027/05.
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                                  New antisense oligonucleotides for modulating junctional adhesion molecule 3 expression, useful for diagnosing, preventing or treating conditions associated with the adhesion molecule, e.g. multiple sclerosis
                                                                                                                                                                    The invention relates to a compound 8-80 nucleobases in length targeted to a nucleic acid molecule encoding junctional adhesion molecule 3 (JAM 3). The antisense oligonucleotide is useful for inhibiting the expression of junctional adhesion molecule 3 in cells or tissues to treat diseases associated with their expression, e.g. an autoimmune disorder (e.g. multiple sclerosis), an organ rejection or an inflammation. In addition, the compound is used for diagnostics, prophylaxis, or as research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides for modulating junctional adhesion molecule 3 expression, useful for diagnosing, preventing or treating conditions associated with the adhesion molecule, e.g. multiple sclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a compound 8-80 nucleobases in length targeted to a nucleic acid molecule encoding junctional adhesion molecule 3 (JAM 3). The antisense oligonucleotide is useful for inhibiting the expression of junctional adhesion molecule 3 in cells or tissues to treat diseases associated with their expression, e.g. an autoimmune disorder (e.g. multiple sclerosis), an organ rejection or an inflammation. In addition, the compound is used for diagnostics, prophylaxis, or as research
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                           reagents or kits. The present sequence represents a human junctional adhesion molecule 3 (JAM 3) antisense oligonucleotide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
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                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;
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                                                                                                                                   Example 15; SEQ ID NO 50; 57pp; English.
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Best Local Similarity 85.0
Matches 17; Conservative
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WPI; 2004-061251/06.
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                                                                                               or organ rejection
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to nucleic acids encoding a mammalian glucocorticoid receptor. The antisense oligonucleotides of the invention are useful for preventing or delaying infection, inflammation or tumour formation. The antisense oligonucleotides are also useful for treating diabetes, obesity, cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The present DNA sequence represents an antisense oligonucleotide that targets
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense compound targeted to a nucleic acid molecule encoding mammalian glucocorticoid receptor, useful for treating diabetes, obesity, cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention comprises an antisense oligonucleotides that are targeted
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                                                                                                                                             Human glucocorticoid receptor-specific antisense oligonucleotide #226
                                                                                                                                                                                        antisense oligonucleotide; glucocorticoid receptor; infection; inflammation; tumour formation; diabetes; obseity; scardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; phosphorothioate backbone; 2'-methoxyethy1; 2'-MOE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the human glucocorticoid receptor gene. NOTE: The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 15.2; DB 1; Length 20;
Pred. No. 5.8e+02;
0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rat PIM1 antisense oligonucleotide K10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; SEQ ID NO 226; 985pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  620 TTAAGCTGGACAAACTGGGC 639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTAAGCAAGAGAACTGGGC 1
                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                  20-MAY-2003; 2003WO-US016084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-MAY-2002; 2002US-0381857P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.9%;
                    ADH63392 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADI26613 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Crosby SD, Nalseth AE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-035034/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                 WO2003099215-A2.
                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-APR-2004
                                                                                                         25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                       04-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 367
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Matches
ADH63392/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             to nucleic acids encoding a mammalian glucocorricoid receptor. The antisense oligonucleotides of the invention are useful for preventing or delaying infection, inflammation or tumour formation. The antisense oligonucleotides are also useful for treating diabetes, obesity, cardiovascular disorders, hyperlipidaemia or Cushing's syndrome. The present DNA sequence represents an antisense oligonucleotide that targets the human glucocorricoid receptor gene. NOTE: The present sequence contains 2'-methoxyethyl (2'-MOE) wings and a phosphorothioate backbone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense compound targeted to a nucleic acid molecule encoding mammalian glucocorticoid receptor, useful for treating diabetes, obesity, cardiovascular disorder, hyperlipidemia or Cushing's syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense oligonucleotide; glucocorticoid receptor; infection; infilammation; tumour formation; diabetes; obesity; cardiovascular disorder; hyperlipidaemia; Cushing's syndrome; human; ss; phosphorothioate backbone; 2-methoxyethyl; 2'-MOE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention comprises an antisense oligonucleotides that are targeted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human glucocorticoid receptor-specific antisense oligonucleotide #480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                      Gaps
or kits. The present sequence represents a human junctional molecule 3 (JAM 3) target sequence.
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Pred. No. 5.8e+02;
0; Mismatches 3; Indels
                                                                                                         Length 20;
                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 3 A; 6 C; 2 G; 9 T; 0 U; 0 Other;
                                                                 Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                         Score 15.2; DB 1;
Pred. No. 5.8e+02;
                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 4; SEQ ID NO 480; 985pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            619 ATTAAGCTGGACAAACTGGG 638
                                                                                                                                                                                                 585 ATCTGAGATTGGCTTTGGGA 604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
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                                                                                                         0.9%;
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                                                                                                                                                      17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nalseth AE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (PHAA ) PHARMACIA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-035034/03
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Best Local Similarity
                                                                                                         Query Match
Best Local Similarity
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Gaps

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Matches

RESULT 366

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Freier SM;
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                                                    US2004006029-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2004006029-A1.
            Homo sapiens.
                                                                                                       08-JAN-2004.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-APR-2004
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                                                                                                                                                                                                                                                                                                    Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADI27456;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 369
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This invention describes novel outgoinclectices or polymiciscotice constructs which are used in pharmaceutical or diagnostic compositions. The oligonuclectides are used for identifying modulators of pain, based on the ability of labelled oligonuclectides or polymuclectide constructs to bind to an RNA. The oligonuclectides can also be used to diagnose disease associated with altered expression of genes of the PIM kinase camples by measuring binding. The oligonuclectides have at least one modified ribose, phosphodiester and/or base component. Particularly many, of the nucleotide sare 'locked nucleic acids' (LNA) or at least one nucleotide is a phosphorothioate. The polymucleotide construct comprises a ribozyme, bNA enzyme, vector (particularly for expression) or peptide nucleic acid, most preferably a hammerhead ribozyme or Type 8-17 DNA enzyme. It may be attached to a carrier (preferably the proteins tet, transportin or ferritin) and/or encapsulated in a liposome. The products of the invention have analgesic, uropathic, antipruritic, cytostatic, and catalytic inhibition of PIM kinases and for antisense gene therapy. The oligonucleotides are useful for treating (i) pain, especially or inflammation, heat-induced or inflammatory pain, or tactile allodynia and (ii) curinary incontinence neurogenic bladder symptoms, pruritus, tumours and inflammation, especially PIM kinases associated inflammation as asthma, or generally any PIM1-kinase associated inflammation and sethmation of PIM family agenes. AD12652-AD126627 cused to screen for analgesic agents and for diagnosis of diseases associated with expression of PIM family agence. AD12652-AD126627 invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                  New oligonucleotides directed against PIM1 kinase, useful for treating, e.g. pain, urinary incontinence, tumors and inflammation, by gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention describes novel oligonucleotides or polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human cell division cycle 2 target sequence ISIS 124874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hyperproliferative disorder; cancer; bone metabolism; Alzheimer's disease; human; cell division cycle 2; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                             Erdmann V;
                                                                                                                                                                                                                                                                                       Gruenweller A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           254 CTGGAGAGGCCCCCACACGT 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Fig 3; 37pp; German.
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                                                                                                                                             12-JUN-2003; 2003WO-EP006158
                                                                                                                                                                                             14-JUN-2002; 2002DE-01026702.
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                                                                                                                                                                                                                                        (CHEF ) GRUENENTHAL GMBH
                                                                                                                                                                                                                                                                                          Kurreck J,
                                                                                                                                                                                                                                                                                                                                       WPI; 2004-142780/14
                                          WO2003106681-A2
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                                                                                             24-DEC-2003
Rattus sp.
                                                                                                                                                                                                                                                                                       Altan O,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADI27476;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     therapy.
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The invention relates to a compound targeted to and which specifically hybridises with a nucleic acid molecule encoding cell division cycle 2, and inhibits the expression of cell division cycle 2. The compound, composition and methods are useful for treating a disease or condition associated with cell division cycle 2, such as hyperproliferative disorder. e.g. cancer, or a disease or condition resulting from dysrequlation of bone metabolism, or Alzheimer's disease. They are also useful in research and diagnostics for modulating the expression of cell division cycle 2. The present sequence represents a human cell division
                                                                                                                                                                                                                            New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding cell division cycle 2, useful for treating cancer, a disease resulting from dysregulation of bone metabolism or Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hyperproliferative disorder; cancer; bone metabolism; Alzheimer's disease; human; cell division cycle 2; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 15.2; DB 1;
Pred. No. 5.8e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                             Example 15; SEQ ID NO 119; 61pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1031 CTGACTTTGGCCTGGCCCGA 1050
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADI27456 standard; DNA; 20 BP
02-JUL-2002; 2002US-00189266,
                                           02-JUL-2002; 2002US-00189266,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cycle 2 target sequence.
                                                                                        (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-081741/08
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08-JAN-2004
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The invention relates to a compound targeted to and which specifically hybridises with a nucleic acid molecule encoding cell division cycle 2, and inhibits the expression of cell division cycle 2. The compound, composition and methods are useful for treating a disease or condition associated with cell division cycle 2, such as hyperpoliferative disorder e.g. cancer, or a disease or condition resulting from dysregulation of bone metabolism, or Alzheimer's disease. They are also useful in research and diagnostics for modulating the expression of cell division cycle 2. The present sequence represents a human cell division cycle 2 target sequence. New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding cell division cycle 2, useful for treating cancer, a disease resulting from dysregulation of bone metabolism or Alzheimer's Example 15; SEQ ID NO 99; 61pp; English disease

Score 15.2; DB 1; Length 20; Pred. No. 5.8e+02; 0; Mismatches 3; Indels Sequence 20 BP; 9 A; 2 C; 6 G; 3 T; 0 U; 0 Other; 710 TCAGACTGGAACATGAAGAG 729 0.9%; Local Similarity 85.0%; hes 17; Conservative Query Match

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Gaps

; 0

TCAGACTAGAAAGTGAAGAG 20

ADI27409 standard; DNA; 20 (first entry) 22-APR-2004

BP

Human cell division cycle 2 antisense oligonucleotide ISIS 207240.

isorder; cancer; bone metabolism; human; cell division cycle 2; ss; antisense. disorder; hyperproliferative di Alzheimer's disease;

Homo sapiens Synthetic.

US2004006029-A1.

02-JUL-2002; 2002US-00189266

02-JUL-2002; 2002US-00189266

(ISIS-) ISIS PHARM INC

Dean NM, Freier SM;

WPI; 2004-081741/08.

New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding cell division cycle 2, useful for treating cancer, a disease resulting from dysregulation of bone metabolism or Alzheimer's

Example 15; SEQ ID NO 52; 61pp; English.

The invention relates to a compound targeted to and which specifically hybridises with a nucleic acid molecule encoding cell division cycle 2, and inhibits the expression of cell division cycle 2. The compound, composition and methods are useful for treating a disease or condition associated with cell division cycle 2, such as hyperproliferative disorder e.g. cancer, or a disease or condition resulting from

20 rcagacragaaagrgaagag 1

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ó, New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding cell division cycle 2, useful for treating cancer, a disease resulting from dysregulation of bone metabolism or Alzheimer's useful in research and diagnostics for modulating the expression of cell division cycle 2. The present sequence represents a human cell division cycle 2 antisense oligonucleotide. dysregulation of bone metabolism, or Alzheimer's disease. They are also Gaps Human cell division cycle 2 antisense oligonucleotide ISIS 207213. antisense .. 0 Score 15.2; DB 1; Length 20; Pred. No. 5.8e+02; 0; Mismatches 3; Indels hyperproliferative disorder; cancer, bone metabolism; Alzheimer's disease; human; cell division cycle 2; ss; Seguence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other; 1031 CTGACTTTGGCCTGGCCCGA 1050 20 crearrirescerreceasa 1 BP. 02-JUL-2002; 2002US-00189266. 02-JUL-2002; 2002US-00189266. Query Match 0.9%; Best Local Similarity 85.0%; Matches 17; Conservative ADI27382 standard; DNA; 20 (first entry) (ISIS-) ISIS PHARM INC Freier SM; WPI; 2004-081741/08. JS2004006029-A1 Homo sapiens 22-APR-2004 08-JAN-2004 Synthetic. ADI27382; Dean NM, RESULT 371 ADI27382/ d 22222X à

ö The invention relates to a compound targeted to and which specifically hybridises with a nucleic acid molecule encoding cell division cycle 2, and inhibits the expression of cell division cycle 2. The composition and methods are useful for treating a disease or condition associated with cell division cycle 2, such as hyperproliferative disorder e.g. cancer, or a disease or condition resulting from dysregulation of bone metabolism, or Alzheimer's disease. They are also useful in research and diagnostics for modulating the expression of cell division cycle 2. The present sequence represents a human cell division Gaps ; 0 0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; ative 0; Mismatches 3; Indels Sequence 20 BP; 3 A; 6 C; 2 G; 9 T; 0 U; 0 Other; 710 TCAGACTGGAACATGAAGAG 729 cycle 2 antisense oligonucleotide Query Match 0.9 Best Local Similarity 85.0 Matches 17; Conservative à

Example 15; SEQ ID NO 25; 61pp; English.

20 CGAGACCTCAACTCCCACAA 1

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Page 199

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The invention describes a compound 8-80 nucleobases in length targeted to a nucleic acid molecule encoding LIM domain kinase 1. The compound specifically hybridises with the nucleic acid molecule encoding LIM domain kinase 1 and inhibits the expression of LIM domain kinase 1. It specifically hybridises with at least an 8-nucleobase portion of a preferred target region on the nucleic acid molecule encoding LIM domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides for modulating LIM domain kinase 1 expression, useful for diagnosing, preventing or treating conditions associated with the kinase, e.g. neurological or developmental disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             kinase 1. The antisense oligonucleotide is useful for modulating the expression of LIM domain kinase 1 in cells or tissues to treat diseases associated with their expression, such as a developmental disorder or a neurological disorder. In addition, the compound is used for diagnostics,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  prophylaxis, or as research reagents or kits. This sequence represents a human LIM domain kinase 1 antisense oligonucleotide.
                                                                                                                                                                                                                                                                                              /note= "OTHER= Phosphorothioate backbone. All cytidines are 5-methylcytidines"
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"note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                           neuroprotective, LIM domain kinase 1; developmental disorder; neurological disorder; diagnostic; prophylaxis; human; ss.
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                                                                                                             Human LIM domain kinase 1 antisense oligonucleotide #43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 2 A; 2 C; 9 G; 7 T; 0 U; 0 Other;
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/*tag= b
/mod_base= OTHER
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               ADI38759 standard; DNA; 20 BP.
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                                              ADI38759
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Best Local S
ADI38759/c
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The invention describes a new antisense oligonuclectide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclindependent kinase 4, specifically hybridises with the nucleic acid encoding cyclin-dependent kinase 4 and inhibits expression of cyclindependent kinase 4. The antisense oligonuclectide is useful for preparing a composition for treating diabetes, infertility or hyperproliferative disorder, e.g., cancer. This sequence represents a human cyclin dependent kinase 4 antisense oligonuclectide.
                                                                                                                                                                                                                                                                                                      /note= "OTHER= Phosphorothioate backbone. All cytidines are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotide, having a sequence targeted to a nucleic acid encoding cyclin-dependent kinase 4, useful for preparing a composition for treating diabetes, infertility or hyperproliferative disorder, e.g., cancer.
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'note= "OTHER= 2'-O-Methoxyethy1 (2'-MOE) nucleotides"
                                                                                                                                                cytostatic; antidiabetic; antiinfertility; gene therapy;
cyclin-dependent kinase 4; diabetes; infertility;
hyperproliferative disorder; cancer; antisense technology; human; ss.
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85.0%; Pred. No. 5.8e+02;
Live 0; Mismatches 3; Indels
                                                                                                                    Cyclin dependent kinase 4 antisense oligonucleotide #31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
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                             ADI26865 standard; DNA; 20 BP
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RESULT 37.
ADI26865/
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976 CGAGACCTCAAGCCCCAGAA 995

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(first entry)

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Phospholipase D2; hyperproliferative disorder; cancer; neurodegenerative disease; Alzheimer's disease; Parkinson's disease; infection; inflammation; tumour; therapy; human; antisense; ss.
                                                                                Human phospholipase D2 antisense oligonucleotide ISIS #159059
                   ADJ64122 standard; DNA; 20
                                                               06-MAY-2004
                                                                                                                                                                 Synthetic.
                                           ADJ64122
RESULT 375
                                                                                                                                                      Ношо
            ADJ64122
                               The invention describes a new antisense oligonucleotide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclindependent kinase 4, specifically hybridises with the nucleic acid encoding cyclin-dependent kinase 4 and inhibits expression of cyclin-dependent kinase 4. The antisense oligonucleotide is useful for preparing a composition for treating diabetes, infertility or hyperproliferative disorder, e.g., cancer. This sequence represents a human cyclin dependent
                                                                                                                                                                                                                    /mod_base= OTHER
/note= "OTHER= Phosphorothioate backbone. All cytidines
are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotide, having a sequence targeted to a nucleic acid encoding cyclin-dependent kinase 4, useful for preparing a composition for treating diabetes, infertility or hyperproliferative
                                                                                                                                                                                                                                                                                                                               'note= "OTHER= 2'-0-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                     nucleotides"
                                                                                                                                cyclin-dependent kinase 4; diabetes; infertīlity;
hyperproliferative disorder; cancer; antisense technology; human; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 15.2; DB 1; Length 20; 35.0%; Pred. No. 5.8e+02; ve 0; Mismatches 3; Indels
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                                                                                                 Cyclin dependent kinase 4 antisense oligonucleotide #181.
                                                                                                                       antidiabetic; antiinfertility; gene therapy;
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kinase 4 antisense oligonucleotide.
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                                   ADI27015 standard; DNA;
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                                                                             22-APR-2004
                                                                                                                        cytostatic;
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                                                        ADI27015;
              RESULT 374
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compounds targeted to nucleic acid molecules encoding phospholipase D2, useful for treating diseases associated with expression of phospholipase D2, e.g. cancer, Alzheimer's disease or Parkinson's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to antisense oligonucleotides which are targetted to nucleic acid molecule encoding phospholipase D2 and the encoding protein. The invention is useful for inhibiting the expression of phospholipase D2 and for treating diseases and conditions associated with expression of phospholipase D2 e.g. hyperproliferative disorder such as cancer, neurodegenerative disease such as Alzheimer's disease and Parkinson's disease. The invention is also useful for therapeutic and prophylactic applications to prevent or delay infection, inflammation and tumour formation. The present sequence is human phospholipase D2 antisense oligonucleotide.
                                                                             /mod_base= OTHER
/note= "Phosphorothioate backbone where all cytidines are
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/note= "2'- methoxyethyl (2'-MOE) nucleotides"
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/note= "2' - methoxyethyl (2'-MOE)
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 targetted to mucleic acid molecule encoding phospholipase D2 and the encoding protein. The invention is useful for inhibiting the expression of phospholipase D2 and for treating diseases and conditions associated with expression of phospholipase D2 e.g. hyperproliferative disorder such as cancer, neurodegenerative disease such as Alzheimer's disease and Parkinson's disease. The invention is also useful for therapeutic and prophylactic applications to prevent or delay infection, inflammation and tumour formation. The present sequence is human phospholipase D2 target
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neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
infection; inflammation; tumour; therapy; human; ss.
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85.0%; Pred. No. 5.8e+02;
live 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                       Human phospholipase D2 target oligonucleotide #13.
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1 GCACTGCCTCCTGGAAGTG 20
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Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-MAY-2004
                                                                                                                                                                                                                                                                                    06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-JAN-2004
                                                                                                                                                                                                                        ADJ64156;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
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                                                                                             RESULT 376
                                                                                                                              ADJ64156,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADL00971/
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The invention relates to an antisense compound targeted to a nucleic acid molecule encoding human vascular endothelial growth factor (VBGF) corregulate chemokine-1 (VCC-1), and which specifically hybridises with and inhibits the expression of VCC-1. The invention also relates to a composition comprising the antisense compound, a method of inhibiting the expression of VCC-1 in clist or tissues comprising contacting the cells or tissues with the antisense compound and a method of inhibiting having a disease or condition associated with VCC-1 comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     administering the antisense compound to a mainal to inhibit expression of VCC-1. The antisense compound to a mainal to inhibit expression of VCC-1. The antisense coligonucleotide comprises at least one modified comprises at least one modified super molety, preferably a 2'-0-methoxyethyl sugar molety, and at least one modified nucleobase, specifically a 5-methylcytosine. The antisense oligonucleotide preferably is a chimeric oligonucleotide. The antisense compound is useful for treating a disease or condition associated with VCC-1, such as diabetes, an immunological disorder, a cardiovascular disorder, a neurological disorder, a cardiovascular disorder, an anapiogenic disorder, e-g, haemangioma, tumour angiogenesis, rheumatoid arthritis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    atherosclerosis, psoriasis or fibrosis after myocardial infarction. VCC-1 antisense oligonucleotides may also be used for wound healing, for healing of bone fractures and cartilage damage, for regeneration of
                                                                                immunological disorder; cardiovāscular disorder; neurological disorder; ischaemia; reperfusion injury; cancer; anglogenic disorder; haemangioma; tumour angiogenesis; rheumatoid arthritis; atherosclerosis; psoriasis; fibrosis; myocardial infarction; wound healing; bone fracture;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tissues or organs, for treating periodontal diseases, for gut protection or regeneration, for treatment of lung or liver fibrosis or for management of atrial fibrillation. This sequence represents an antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              management of atrial fibrillation. This sequence represents an antisense oligonuclectide targeted to DNA encoding the human VCC-1 polypeptide of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense compounds targeted to a nucleic acid molecule encoding vascular endochalial growth factor co-regulated chemokine-1 (VCC-1), useful for treating VCC-1-associated disorders, e.g. diabetes or a neurologic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
               antisense compound;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.9%; Score 15.2; DB 1; Length 20; Best Local Similarity 85.0%; Pred. No. 5.8e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                   cartilage damage; tissue regeneration; organ regeneration; periodontal disease; gut regeneration; atrial fibrillation
vascular endothelial growth factor; ss; antisense comp
phosphorothioate linkage; 2'-0-methoxyethyl sugar moie
5-methylcytosine; antisense oligonucleotide; diabetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 4; SEQ ID NO 504; 336pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1176 CTTCTATGAGATGGCCACAG 1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTCTAGGAGATGGCTCCAG 1
                                                                                                                                                                                                                                                                                                                                                                                                           19-AUG-2003; 2003WO-US025891.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-AUG-2002; 2002US-0404484P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (PHAA ) PHARMACIA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-192065/18.
                                                                                                                                                                                                                                                                                                          WO2004016224-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the invention.
                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Weinstein EJ;
                                                                                                                                                                                                                                                                                                                                                         26-FEB-2004
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RESULT 378

Human; VEGF co-regulated chemokine-1; VCC-1;

ZXEXEXEX ZXEXEXEX

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Length 20;

Query Match

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vascular endothelial growth factor; ss; antisense compound; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; sheethylosome lankage; 2'-O-methoxyethyl sugar moiety; is—methylotylosine, antisense oligomucleotide; diabetes; immunological disorder; cardiovascular disorder; neurological disorder; tatmour angiogenesis; reperfusion injury; cancer; angiogenic disorder; haemangioma; tumour angiogenesis; rheumatoid arthritis; atherosoclerosis; psorlasis; fibrosis; myocardial infarction; wound healing; bone fracture; cartilage damage; tissue regeneration; organ regeneration; periodontal disease; gut regeneration; atrial fibrillation.
                                                                                   Human VEGF co-regulated chemokine-1 DNA antisense oligonucleotide #625.
                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense compounds targeted to a nucleic acid molecule encoding vascular endothelial growth factor co-regulated chemokine-1 (VCC-1), useful for treating VCC-1-associated disorders, e.g. diabetes or a
                                                                                                          VEGF co-regulated chemokine-1; VCC-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 4; SEQ ID NO 625; 336pp; English.
BP
                                                                                                                                                                                                                                                                                                              19-AUG-2003; 2003WO-US025891
                                                                                                                                                                                                                                                                                                                                     19-AUG-2002; 2002US-040484P
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셤 XXXXXX ð The invention relates to an antisense compound targeted to a nucleic acid molecule encoding human vascular endothelial growth factor (VEGF) coregulated chemokine-1 (VCC-1), and which specifically hybridises with and inhibits the expression of VCC-1. The invention also relates to a composition comprising the antisense compound, a method of inhibiting the expression of VCC-1 in cells or tissues compound, a method of inhibiting the expression of VCC-1 in cells or tissues compound and a method of treating a human or tissues with the antisense compound and a method of treating a human carried a disease or condition associated with VCC-1 comprising of administering the antisense compound to an animal to inhibit expression of VCC-1. The antisense oligonucleotide comprises at least one modified comprises at least one modified sugar moiety, preferably a 2'-0-comprises at least one modified sugar moiety, preferably a 2'-0-comprises at least one modified sugar moiety, preferably a 2'-0-comprises at least one modified nucleobase, capecifically a 5-methylotycosine. The antisense oligonucleotide prefers to remain a disease or condition associated with VCC-1, such as diabetes, an immunological disorder, a cardiovascular disorder, a neurological disorder, a cardiovascular disorder, a neurological disorder, a cardiovascular disorder, a neurological disorder, and injury, cancer or an angiogenic or attisense oligonucleotides may also be used for wound healing, for the continue or profession of the pr tissues or organs, for treating periodontal diseases, for gut protection Seguence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Culturing a porcine pluripotent cell for establishing pluripotent/totipotent porcine cell lines, comprises culturing the porcine pluripotent cell in the presence of STO8 feeder cells expressing porcine stem cell factor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ō
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention describes a method for culturing a porcine pluripotent cell, comprising culturing a porcine pluripotent cell in the presence of STOB feeder cells which express a porcine stem cell factor. The porcine stem cell factor is in membrane-bound form. The method is useful for establishing pluripotent or totipotent porcine cell lines. The present sequence represents a PCR primer used to clone porcine stem cell factor.
                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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0
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0
                                                                                                                                                                                                                                                                           ss; porcine pluripotent cell; porcine stem cell factor; pSCF; porcine steel factor; primer; PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.9%; Score 15.2; DB 1; Length 20;
35.0%; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other;
0.9%; Score 15.2; DB 1;
85.0%; Pred. No. 5.8e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                     Porcine stem cell factor (pSCF), PCR primer #6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primer of the invention SEQ ID NO:11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 4; SEQ ID NO 11; 38pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        pscr), also known as porcine 'steel'
                                                           1177 ITCTATGAGATGGCCACAGG 1196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          424 ATGCGCAACCATCCCCCACG 443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Arececacionricionas 20
                                                                                BP.
                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-00133352.
                                                                                                                                                                                                                                                                                                                                                                                                                  98US-00133352,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              82.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADM11113 standard; DNA; 20
                                                                                                                                                              ADL09179 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BIOT-) BIOTRANSPLANT INC.
                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 85.0
Matches 17; Conservative
                                17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Baetscher M, Brem G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-292803/27.
                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                  13-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                        US6703209-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                               13-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUN-2004
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                                                                                                                                                                                                                          20-MAY-2004
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                                                                                                                                                                                              ADL09179;
                                                                                          20
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                                Matches
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immunomodulatory; cardiovascular; gene therapy; inflammation; Alzheimer's disease; arthritis; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; ss.
                                                                                                                                                                                                                                                                                                                                                  ADM14055 standard; DNA; 20 BP
                                                                12-SEP-2003; 2003WO-JP011752
                                                                              17-SEP-2002; 2002JP-00269645.
                                                                                                 (RIKE ) RIKEN KK.
(KAZU-) KAZUSA DNA RES INST.
                                                                                                                                                                                                                                                                                        17; Conservative
                                                                                                                                 WPI; 2004-295419/27
                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                      WO2004027060-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                            01-JUL-2004
                                                   01-APR-2004
                          Synthetic
                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                               ADM14055;
                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                     RESULT 38:
ADM14055/c
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/note= "2'-0-methoxyethyls" Claim 4; SEQ ID NO 242; 132pp; English. Location/Qualifiers 524 base= OTHER 20 GTGGCCTACCTGGGGAAGCT 1 505 GAGGGCTACCTGGAGAAGCT 25-SEP-2003; 2003WO-US030374. 25-SEP-2002; 2002US-0413549P. \*tag= b Best\_Local Similarity 85.0 Matches 17; Conservative (PHAA ) PHARMACIA CORP WPI; 2004-305094/28. WO2004028458-A2 Key modified\_base modified\_base modified base 08-APR-2004 Query Match ઠ ó; The invention relates to a novel method for nucleic acid amplification, in which polymerase chain reaction (PCR) is carried out in the presence of the RecA recombinase protein of Thermus thermophilus and/or of a protein with similar activity obtained by modification of its sequence. The method is useful for detection of single nucleotide polymorphisms (SNP). Addition of the RecA recombinase inhibits amplification of PCR byproducts such as those caused by polymerase misreading and allows PCR from small amounts of template to be used for detection of SNP with high accuracy, The sequences shown in ADMIL103-ADMIL234 represent PCR primers chimeric; antisense oligonucleotide; phosphorothioate; human; microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor; microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic; immunomodulator; cardiant; neuroprotective; antiinflammatory; neuroprotective; notioprotective; notice notioprotective; notioprotective; notice notioprotective; notice noti Amplification of nucleic acids in the presence of RecA protein for accurate detection of single nucleotide polymorphisms with inhibition of by-product amplification. Gaps ss; primer; PCR; RecA; recombinase; protein; Thermus thermophilus; single nucleotide polymorphisms; SNP. ö Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:242. 0.9%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 5.8e+02; rative 0; Mismatches 3; Indels Ohara O; Sequence 20 BP; 4 A; 8 C; 6 G; 2 T; 0 U; 0 Other; used to illustrate the method of the invention. Oishi M, Example 1; SEQ ID NO 11; 172pp; Japanese. Shigemori Y, Shibata T, Mikawa T, (AISI-) AISIN COSMOS R & D CO LTD. 499 CTGCCTGAGGGCTACCTGGA 518 CTGCTTGGGGGCCACCTGGA 1 (first entry)

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The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mpGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to add an unclaim a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (3) a method of inhibiting the expression of mPGES-1 in cells or tissues; and aliance compounds have cytostatic, antidiabetic, immunomodulator, cardiant, neuroprotective, antidiabetic, immunomodulator, cardiant, neuroprotective, antidiabetic, immunomodulatory and cardiavascular activities, and can be used as mPGES-1 inhibitors and in gene therapy. The antisense compound can be used for preparing a composition for treating a disease or condition associated with mPGES-1 e.g., inflammation, Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
/mod_base= OTHER
/note= "phosphorothioate linkages and all cytidine
residues are 5-methylcytidines"
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85.0%; Pred. No. 5.8e+02;
ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 4 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
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(first entry)

12-AUG-2004

Human forkhead box C2 antisense oligonucleotide ISIS227189.

Location/Qualifiers

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/mod\_base= OTHER /note= "2'-methoxyethyl residue"

methylcytidines"

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/\*tag=

/\*tag= b /mod\_base= OTHER

/note= "2'-methoxyethyl residue"

base= OTHER

/mod\_

υ

/\*tag=

16. .20

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The invention relates to a new compound 8-80 nucleobases in length (an antisense oligonucleotide) targeted to a nucleic acid molecule encoding forkhead box C2, where the compound specifically hybridises with the nucleic acid molecule encoding human forkhead box C2 appearing as ADN31339 and inhibits the expression of forkhead box C2. Also included are inhibiting the expression of forkhead box C2 in cells or tissues, screening for a modulator of forkhead box C2, a diagnostic method for identifying a disease state, a kit or assay device comprising the compound and treating an animal having a disease or condition associated with forkhead box C2. The compound and methods are useful in diagnosing with forkhead box C2. The compound and methods are useful in diagnosing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               present sequence is an antisense oligonucleotide targeting forkhead box
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New compound targeted to a nucleic acid molecule encoding forkhead box C2, useful in diagnosing and treating developmental disorder.
                                      Human; ss; antisense; forkhead box C2; developmental disorder; lympoedema; lympoedema-distichiasis; dysgenesis; iridocorneal angle; Axenfeld-Rieger anomaly; congenital glaucoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 15; SEQ ID NO 74; 80pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                  21-NOV-2002; 2002US-00303635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-NOV-2002; 2002US-00303635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-399740/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                        US2004102621-A1
                                                                                                                                        Key
modified_base
                                                                                                                                                                                                                                                                                          modified_base
                                                                                                                                                                                                                                modified base
                                                                                                            Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AD055804/c
ID AD05
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3; Indels

0; Mismatches

17; Conservative

GGCAGCTGTCAATGACACTC 168

20

GGCAGCTGGCATTGCCACTC

Score 15.2; DB 1; Length 20; Pred. No. 5.8e+02;

0.9%;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides for modulating never in mitosis, gene a (NIMA)-related kinase 6 expression, useful for diagnosing, preventing ctreating diseases associated with the kinase, e.g. hyperproliferative
                                                                                                                                                                                                                                                                                                           /mod_base= OTHER
/mode= "This oligonuclectide has a phosphorothicate
/note= "This oligonuclectide has a phosphorothicate
backbone and 2'-methyoxyethyl (2'-MOE) wings at the 5'
and 3' ends, which are 5 nuclectides in length at each
end. All cytidine residues are 5-methylcytidines"
                                                                                                                              Antisense therapy; human; NIMA-related kinase 6;
never in mitosis gene a-related kinase 6; hyperproliferative disorder;
cancer; cytostatic; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hyperproliferative disorders, e.g. cancer. The present sequence represents an antisense oligonucleotide used in the examples of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              modified nucleobase, preferably a 5-methylcytosine. The antisense oligonucleotides are useful for the treatment of diseases such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
                                                                                             Human NIMA-related kinase 6 DNA, antisense oligonucleotide #27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match

0.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 15; SEQ ID NO 41; Slpp; English
                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         967 GIGCIACACCGAGACCICAA 986
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                                                        (first entry)
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/*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                          US2004097441-A1.
                                                                                                                                                                                                                                                           Key
modified_base
                                                                                                                                                                                                                      sapiens
                                                      12-AUG-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    disorders.
                  ADO55804;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dobie KW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 384
                                                                                                                                                                                                                        Ношо
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                                                                                                                                                                                                                                                           /note= "Phosphorothioate backbone and all cytidines are 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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Cytomegalovirus.

WO9203456-A.

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New antisense oligonucleotides for modulating never in mitosis, gene a (NIMA) -related kinase 6 expression, useful for diagnosing, preventing or treating diseases associated with the kinase, e.g. hyperproliferative
                                                                                                           Antisense therapy; human; NIMA-related kinase 6;
never in mitosis gene a-related kinase 6; hyperproliferative disorder;
                                                                                          Human NIMA-related kinase 6 DNA target sequence #20
                                                                                                                                                                                                                                                                                                                                            Example 15; SEQ ID NO 112; 51pp; English.
                                                                                                                                                                                                                        16-NOV-2002; 2002US-00295471.
                                                                                                                                                                                                        2002US-00295471.
                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antisense oligonucleotide
                                                                                                                                cancer; cytostatic; ds.
                                                                                                                                                                                                                                           PHARM INC
                                                                                                                                                                                                                                                                             WPI; 2004-389184/36.
                                                                                                                                                                  JS2004097441-Al
                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                      16-NOV-2002;
                                                                                                                                                                                                                                           SISI (-SISI)
                                                                          12-AUG-2004
                                                                                                                                                                                     20-MAY-2004
                                                                                                                                                                                                                                                                                                                           disorders.
                                                         AD055866;
                                                                                                                                                                                                                                                             Dobie KW;
Tue Nov
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The present invention relates to antisense compounds targeted to a nucleic acid encoding human never in mitosis gene a-related kinase 6 (NIMA-related kinase 6). The antisense compound comprises an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits the expression of NIMA-related kinase 6. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense coligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothioate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5'-0-methoxyethyl (2'-MOE) sugar moiety preferably a 5'-methycytosine. The antisense oligonucleotides are useful for the treatment of diseases such as hyperproliferative disorders, e.g. cancer. The present sequence conservations and the second sequence of the second se ; 0 Gaps ·. Score 15.2; DB 1; Length 20; Pred. No. 5.8e+02; 3; Indels Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other, 0; Mismatches 0.9%; 17; Conservative Query Match Best Local Similarity Matches

967 GIGCTACACCGAGACCICAA 986 ð

GTGATGCACCGAGACATCAA 20 RESULT 385 셤

395/c AAQ22395 standard; DNA; 21 09-JUL-1992 AAQ22395; AAQ22395, M M X E X E X E X E X E

BP

(first entry)

ONA for modulating effects of cytomegalovirus infection

IE1; IE2; DNA polymerase; CMV; prophylactic; therapeutic; antisense inhibition; gene expression; intron/exon boundary; ss.

. 0 Oligo-nucleotide(s) for modulating effects of cytomegalovirus infections - which can be hybridised with portion of RNA or DNA derived from IE1, IE2 or DNA genes of cytomegalovirus. The oligonucleotide was synthesised to be complementary to the IE2 NUC SIG 2 of human cytomegalovirus. This site is known to control mRNA stability, processing and/or translational efficiency. The synthetic oligomer can hybridise to the native DNA polymerase of cytomegalovirus and modulate the activity of CMV. The oligomer can be used prophylatically or therapeutically to reduce the severity of disease caused by CMV. It specifically inhibits replication of CMV by antisense inhibition of gene expression. See also AAQ22353-400 Gaps IE2; DNA polymerase; CMV; prophylactic; therapeutic; sense inhibition; gene expression; intron/exon boundary; ss. ; 0 DB 1; Length 21; Indels DNA for modulating effects of cytomegalovirus infection. Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other; э; Pred. No. 6e+02; 0; Mismatches 0.9%; Score 15.2; 85.0%; Pred. No. 6e Disclosure; Table 2; 44pp; English. 130 CGGATGAAGAAGATCAAACG 149 0 21 CGCAAGAGAGAGCAAACG BP. 91WO-U0005815. 90US-00568366 91WO-U0005815. AAQ22372 standard; DNA; 21 09-JUL-1992 (first entry) Query Match
Best Local Similarity 85.0
Matches 17, Conservative Draper KG; PHARM INC WPI; 1992-096819/12 Cytomegalovirus. Anderson KP, SISI (-SISI) 14-AUG-1991; 16-AUG-1990; 14-AUG-1991; 05-MAR-1992. 05-MAR-1992 W09203456-A antisense AAQ22372; RESULT 386 AA022372 à 

90US-00568366 Draper KG; (ISIS-) ISIS PHARM INC. WPI; 1992-096819/12 16-AUG-1990; Anderson KP,

Oligo-nucleotide(s) for modulating effects of cytomegalovirus infections

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Gaps

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diagnosis;

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AAT12008-31 are selected target sites of the cytomegalovirus (CMV) genome suitable for targeting antisense oligonucleotides (ONS). This target sequence covers part of the nuclear localisation signal 2 of intermediate ealry (EB) complex 2 gene. Antisense ONS targeting CMV DNA or RNA coding for the IEI, IE2 or DNA polymerase proteins have been shown to be effective in therapy, prophylaxis and diagnosis of CMV infection. The ONS may be modified to reduce nuclease resistance and to increase their efficacy. Modifications include phosphorothicate backbones, alkyl and halogen-substituted sugar moieties at the 2' position. (Updated on 25-MAR -2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New oligo-nucleotide inhibits cytomegalovirus replication - by binding to a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and treatment of CMV diseases.
infection. The ONs may be modified to reduce nuclease resistance and increase their efficacy. Modifications include phosphorothhoate backbones, alkyl and halogen- substituted sugar moities at the 2' position. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CMV IE2 target gene sequence for antisense oligonucleotides.
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85.0%; Pred. No. 6e+02;
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                                                                                                                  Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                        130 CGGATGAAGAAGATCAAACG 149
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                                                                                                                                                                                                                                                                                              21 CGCAAGAAGAAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
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(first entry)
                                                                                                                                                                 Query Match 0.9
Best Local Similarity 85.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1995-292538/38
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Best Local Similarity
Matches 17; Conserv
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13-MAR-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT12031;
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                                                                                                                                                                                                                                                                                                                                                                           RESULT 388
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       8886688
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                                                                                                              The oligonucleotide was synthesised to be complementary to the IE2 NUC SIG-2 region of human cytomegalovirus. This site is known to control mRNA stability, processing and/or translational efficiency. The synthetic oligomer can hybridise to the native DNA polymerase of cytomegalovirus and modulate the activity of CMV. The oligomer can be used prophylactically or therapeutically to reduce the severity of disease caused by CMV. It specifically inhibits replication of CMV by antisense inhibition of gene expression. See also AAQ22353-400
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This is a claimed antisense oligonucleotide (ON) which when tested for activity against cytomegalovirus (CMY) showed greater than 90% inhibition of virus at a concentration of 5 micros. The target of this ON is nucleotides 170120-141 of the intermediate early 2 (IE2) nuclear localisation signal 2 of the human CMY genome. Antisense ONs targeting CMV DNA or RNA coding for the IE1, IE2 or DNA polymerase proteins have been shown to be effective in therapy, prophylaxis and diagnosis of CMV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis; e early complex; IE1; IE2; DNA polymerase gene; ss.
    - which can be hybridised with portion of RNA or DNA derived from IE1.
                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense oligonucleotide (ISIS 2922) complementary to human CMV
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0
                                                                                                                                                                                                                                                                                                                                                                         0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
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/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                130 CGGATGAAGAAGATCAAACG 149
                                                                             Claim 11; Page 36; 44pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCAAGAAGAAGAGCAAACG 20
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(first entry)
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/*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1995-292538/38
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13-MAR-1996
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Indels

3;

/\*tag= a /note= "at least one (and preferably all) of the backbone subunits are composed of amide units, so that the oligomer consists of the nucleobases attached covalently to a polyamide backbone"

Cowsert LM;

Mirabelli CK, Ecker DJ,

Crooke ST,

Anderson KP,

Cowsert LM;

Ecker DJ,

Mirabelli CK,

WPI; 1995-090841/12.

(ISIS-) ISIS PHARM INC.

94WO-US009039. 93US-00104438

09-AUG-1994; 09-AUG-1993;

16-FEB-1995.

WO9504748-A1

peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus; antiviral; diagnostic; ss.

Location/Qualifiers

/\*tag= "

misc feature

Synthetic

Peptide nucleic acid targetting CMV IE2 nuc sig 2.

(first entry)

17-DEC-1995

AAT01703;

AAT01703 standard; DNA; 21 BP.

RESULT 390 AAT01703

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New oligomers are claimed which (A) have at least one peptide nucleic acid (PRA) subunit and (B) have a sequence hybridisable to AUG region, 5 untranslated region, intron/exon (I/E) junction or coding sequence of cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a papillomavirus The PNAs can be used to target RNA and single stranded DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary inspecific mRNAs). PNA oligomers have high affinity for complementary first PNA strand binds with RNA or ssDNA and a second PNA strand binds with the resulting double helix or with the first PNA strand binds callular uptakes. Futher, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by proteases. The present sequence targets CWV IE2 nuclear localization
                                                                                                                                                                                                                                                                                                                                  /*tag= a honce= "at least one (and preferably all) of the backbone subunits are composed of amide units, so that the oligomer consists of the nucleobases attached covalently
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma:virus - are stable anti:sense molecules with high affinity for single stranded DNA, used for treating infections.
                                                                                                                                                                                             peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
antiviral; diagnostic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.9%; Score 15.2; DB 1; Length 21;
35.0%; Pred. No. 6e+02;
ive 0; Mismatches 3; Indels
                                                                                                                                                       Peptide nucleic acid targetting CMV IE2 nuc sig 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                          to a polyamide backbone"
                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 2; Page 43; 65pp; English.
                                    AAT01647 standard, DNA; 21 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  93US-00104438.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94WO-US009039
                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Crooke ST,
                                                                                                                                                                                                                                                                                                                                *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1995-090841/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SISI (-SISI)
                                                                                                                                                                                                                                                                                                          misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9504748-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Anderson KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-AUG-1993;
                                                                                                                17-DEC-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-FEB-1995
                                                                                                                                                                                                                                                   Synthetic
                                                                          AAT01647;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                             peptide
RESULT 389
                  AAT01647/
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New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5' untranslated region, intron/exon (I/E) junction or coding sequence of cytomegalorius gene selected from DNA polymerase. IE1 and IE2, or hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a papillomavirus. The PNAs can be used to target RNA and single stranded DNA (SSDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which first PNA strand binds with RNA or ssDNA and a second PNA strand binds with the first PNA strand binds with RNA or ssDNA and a second PNA strand binds with the first PNA strand coule call the resulting double helix or with the first PNA strand binds and are water soluble, which facilitates cellular uptake. Futher, since they contain amides of non-biological amine acids, they are biostable and resistant to enzymatic degradation by
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma:virus - are stable anti:sense molecules with high affinity for single stranded DNA, used for treating infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      proteases. The present sequence targets CMV IE2 nuclear localisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; Score 15.2; DB 1; Length 21; 5.0%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 cechagaagaagaadce 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 2; Page 45; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  85.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17; Conservative
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Best Local Similarity
Matches 17; Conserv
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Gaps

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130 CGGATGAAGAAGATCAAACG 149

82.08;

Local Similarity

17;

Best Loc Matches

Conservative

CGCAAGAAGAAGAGCAAACG 2

95WO-US006160 94US-00249386

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Synthetic oligo:nucleotide(s) that hybridise to cytomegalovirus (CMV) DNA inhibit CMV gene expression, useful for treating or preventing human
                                                                                                                        (HYBR-) HYBRIDON INC
                                                                                                                                                                   WPI; 1996-020525/02
                                                                                                                                                                                                              CMV infection.
                               WO9532213-A1
                                                                            9-MAY-1995;
                                                                                                  25-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-AUG-1997
                                                      30-NOV-1995
          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX36470;
                                                                                                                                              Pari GS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 393
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                                                                                                                                                                                                                                                                                                                                                                                                        This sequence represents an antisense oligonucleotide ISIS 2922 which is targetted to the cytomegalovirus (CMV) immediate early 2 (IE2) mRNA. The IE2 protein is capable of transcriptionally activating proteins of cellular and viral origin and is thought to be one of the "master switches" of human CMV (HCNV) gene expression. Therefore disruption of the IE2 mRNA will lead to a reduction in HCMV infectivity. This oligonucleotide may esp. be used in a human medicine to halt progression of CMV retinitis which can cause blindness in immunocompromised, e.g. HIV, patients. It has an additive effect with ganciclovir or foscarnet, and is not adversely affected by AZT or ddC
                                                                                                                        Antisense oligonucleotide; ISIS 2922; cytomegalovirus; CMV; immediate early 2 mRNA; IE2; human; HCMV; CMV retinitis; blindness; HIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Inhibitor; cytomegalovirus; human; antisense oligonucleotide; HCMV; regulatory protein; general transcriptional activator; DNA replication; orilyt-dependent viral replication; phosphorothicate linkage; CMV; IE2; 2-0-methyl linkage; alkylphosphonate linkage; replication deficient;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                    Anti-sense oligo-nucleotide against the CMV immediate early 2 gene useful for treatment of cytomegalovirus infections, esp. retinitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 15.2; DB 1; Length 21; Pred. No. 6e+02; 0; Mismatches 3; Indels
                                                                                                    Antisense oligonucleotide ISIS 2922 targetted to CMV IE2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IE2 translational start inhibitor IE (ISIS).
                                                                                                                                                                                                                                                                                                          Ľ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 24; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 CGCAAGAAGAAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                          Kisner
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                  AAT05682 standard; DNA; 21 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match
Best Local Similarity 85.0'
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                          Chapman SK,
                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        immediate early; ss
                                                                                                                                                                                                                                                                                                                                WPI; 1995-382835/49
                                                                              06-JUN-1996
                                                                                                                                                                                                                                                              26-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-JUN-1996
                                                                                                                                                                                           WO9528941-A1
                                                                                                                                                                                                                                        24-APR-1995;
                                                                                                                                                                                                                 02-NOV-1995
                                                                                                                                                                                                                                                                                                          Draper KG,
                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT07112;
                                                        AAT05682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 391
                        AAT05682/
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                                                 AAT07089-T07112 represent antisense oligonucleotides directed against regions of the human cytomegalovirus (HCMV) genome. This sequence targets the imediate early 2 (IEZ) translational start site. All of the targeted genes are required for orilyt-dependent viral replication. These sequences therefore inhibit HCMV DNA replication by hybridising to these genes under normal physiological conditions. Preferably, these sequences are modified to contain at least 1 internucleotide linkage selected from phosphorothioate, 2-O-methy, and alkylphosphonate linkages. As these sequences inhibit DNA replication, they can be used in compositions to treat or prevent HCMV infection in a cell. The replication deficient CMV strains that can be produced using these sequences will be useful for the study of CMV in the absence of mutant strains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RNaseH; RNA cleavage; DNA cleavage; hybridisation; protein kinase C gene; gene expression modulation; ras; raf; therapy; AIDS; atherosclerosis; infection; cell growth; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chimeric 2'-O-methyl oligo for CMV replication inhibition.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
Disclosure; Page 23; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 cechaghaghaghaghage 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX36470 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-JUL-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (NOVS ) NOVARTIS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-FEB-1996;
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Oligo:nucleotide with RNaseH activity, which specifically hybridises to
                                                                                                                                                       the 2'-0-CH2-CH2-0-CH3 sugar moiety
                                                 Example 22; Page 47; 86pp; English
                                                                                                                                                                                                                                                                                                                                                                                  Cook PD, Monia B, Altmann K,
                                                                                                                                                                                                                                           AAX36471 standard; DNA; 21
                                                                                                                                                                             Query Match 0.9
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                  PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM I
(NOVS ) NOVARTIS AG.
     Monia B,
               WPI; 1997-424968/39
                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1997-424968/39
                                                                                                                                                                                                                                                                                                                                            07-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                       14-FEB-1996;
                                                                                                                                                                                                                                                                06-JUL-1999
                                                                                                                                                                                                                                                                                                                      WO9730067-A1
                                                                                                                                                                                                                                                                                                            Synthetic.
     Cook PD,
                                                                                                                                                                                                                                RESULT 394
AAX36471/c
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Martin P;

This sequence is an example of an oligonucleotide of the invention, and is an inhibitor of CMV replication. The invention relates to oligonucleotides (A), which specifically hybridises to RNA or DNA, comprises a linear sequence of nucleotide units linked by phosphodister or phosphorothioate linkages, comprising a first subsequence having 2'-0-CH2-O-CH3 sugar moieties and a second subsequence having 2'-0-CH2-O-CH3 sugar moieties and a second subsequence having 2'-0-CH2-O-CH3 sugar moieties. (A), which has RNASSH activity for cleaving a complementary strand, can be used to modulate the expression of ras, raf and protein kinase C genes, useful in the therapy of AIDS, and protein kinase C genes, useful in the therapy of AIDS, and protein kinase c genes, useful in the therapy of AIDS, and protein kinase c person useful in the therapy of AIDS, and cell growth in humans, animals or plants. (A) can also be used diagnostically, particularly when labelled, to detect overexpression of mRNA or expression of abnormal RNA, including imaging of tissue sections, and as a research reagent. (A) has increased binding affinity for complementary strands (attributable to the 2'-O-CH2-O-CH3 sugar moiety, which overcomes the loss of affinity caused by altered intersugar links), and increased resistance to nuclease (from the modified links and the 2'-O-CH2-CH2-O-CH3 sugar moiety) DNA or RNA - comprises 1st and 2nd sub:sequence(s) having 2'-O-CH2-CH2-O-CH3 and 2'-deoxy sugar moieties, useful for therapy or diagnosis. phosphorothioate, therapeutic, RNase H activity, ras, antisense, inhibit translation, treating, heparitis, inflammatory disease, interectlular cell adhesion factor; ICAM-1; cytomegalovirus retinitis, cancer, protein kinase C alpha; C-raf; Ha-ras; Ki-ras; AIDS; chiral; thermodynamic stability; hepatitis C virus; ss. DB 1; Length 21; /\*tag= a /note= "phosphorothioate 3' to 5' linkages" Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other; 0.9%; Score 15.2; DB 1 35.0%; Pred. No. 6e+02; ve 0; Mismatches Phosphorothioate oligonucleotide ISIS-2922. Location/Qualifiers Example 22; Page 47; 86pp; English 130 CGGATGAAGAAGATCAAACG 149 cechaehaehaehee AAT49210 standard; DNA; 21 BP 950S-00468447. 950S-00468447. 950S-00468569. 950S-00469851. 950S-00471296. 95US-00466692 96WO-US008757 85.0%; (first entry) Query Match
Best Local Similarity 85.00 .21 (revised) Key modified\_base 06-JUN-1995; 06-JUN-1995; 06-JUN-1995; 06-JUN-1995; 06-JUN-1995; 06-JUN-1995; WO9639154-A1 05-JUN-1996; 02-JUL-2002 03-SEP-1997 12-DEC-1996 Synthetic AAT49210; RESULT 395 AAT49210/ ð Op ö Or phosphorochioate linkages, comprising a first subsequence having 2'-O-TH2-O-CH3 sugar moieties and a second subsequence having 2'-O-CH2-O-CH3 sugar moieties and a second subsequence having 2'-O-CH2-O-CH3 sugar moieties (A), which has RNaseH activity for cleaving a complementary strand, can be used to modulate the expression of ras, raf and protein kinase C genes, useful in the therapy of ALDS, atherosclerosis, bacterial or other infections, or to control aberrant cell growth in humans, animals or plants. (A) can also be used diagnostically, particularly when labelled, to detect overexpression of mRNA or expression of abnormal RNA, including imaging of tissue sections, and as a research reagent. (A) has increased binding affinity for complementary strands (attributable to the 2'-O-CH2-CH3 sugar moiety, which overcomes the loss of affinity caused by altered intersugar links), and increased resistance to nuclease (from the modified links and Oligo:nucleotide with RNaseH activity, which specifically hybridises to DNA or RNA - comprises 1st and 2nd sub:sequence(s) having 2'-O-CH2-CH2-O-CH3 and 2'-deoxy sugar moleties, useful for therapy or diagnosis. RNaseH; RNA cleavage; DNA cleavage; hybridisation; protein kinase C gene; gene expression modulation; ras; raf; therapy; AIDS; atherosclerosis; infection; cell growth; ss. This sequence is an example of an oligonucleotide of the invention, and is an inhibitor of CMV replication. The invention relates to oligonucleotides (A), which specifically hybridises to RNA or DNA, comprises a linear sequence of nucleotide units linked by phosphodiester Gaps ; 0 0.9%; Score 15.2; DB 1; Length 21; Chimeric 2'-0-methyl oligo for CMV replication inhibition. 3; Indels Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other; Pred. No. 6e+02; 0; Mismatches Martin P; 130 CGGATGAAGAAGATCAAACG 149 Altmann K, cecaagaagaagcaaace BP. 97WO-US002043. 96US-0011620P 82.0%; (first entry)

; 0

Gaps .<u>.</u>

3; Indels

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AAT49204-14 are oligonucleotides where at least 75 % of the nucleoside units are joined together by Sp or Rp phosphorothioate 3' to 5' linkages. The oligonucleotides are useful therapeutically, e.g. by eliciting RNase H activity ras antisense molecules to inhibit translation. Uses of the oligos include treating hepatitis, inflammatory diseases mediated by intercellular cell adhesion factor ICAM-1 and cytomegalovirus retinitis, as well as treatment of cancers mediated by protein kinase C alpha, c-raf kinase, Ha-ras or Ki-ras and treating AIDS. The sequence-specific phosphorothicate oligonucleotides have substantially chirally pure intersugar linkages which increase the thermodynamic stability of heteroduplexes with target RNA and DNA. The present sequence is used in the treatment of cytomegalovirus retinitis. (Updated on 02-JUL-2002 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Modified oligo; nucleotide(s) with antiviral activity - used to treat or
                                                                                                         Sequence-specific oligo:nucleotide(s) useful in anti-sense therapy -contain phosphoro:thioate linkages of high chiral purity, also used to induce RNase H activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human, cytomegalovirus, infection, antiviral, CMV, diagnosis, chemical modification; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.9%; Score 15.2; DB 1; Length 21; 55.0%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Anti-cytomegalovirus activity oligonucleotide ISIS 2922.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= a
/note= "Phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                          Claim 1; Page 22; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 CGCAAGAAGAAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT90843 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96US-00615801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97WO-US004235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 0.99
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag=
               (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                   add missing PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (HYBR-) HYBRIDON INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1997-479898/44
                                                                            WPI; 1997-042838/04
                                             Cook PD, Hoke G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9733992-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT90843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pari GS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 39
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Gaps

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                                                                                                              The present sequence represents a chemically modified oligonucleotide with antiviral activity against human cytomegalovirus (CMV). The chemically modified oligonucleotide is targeted to the Ui36/37 gene of CMV, and is used to treat or prevent human CMV infections. Also, the chemically modified oligonucleotide can be used as a diagnostic probe to detect CMV in clinical and experimental samples. Compared with known anti-CMV antisense molecules the chemically modified oligonucleotide is more active, and more stable in vivo (allowing reduction in dose or less frequent administration). It has better bioavallability to target organs and tissues, and is less toxic (in trials, humans tolerated 2 hour infusion of 0.5 mg/kg without toxicity)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New oligo:nucleotide(s) for inhibiting transcription of hepatitis C virus RNA - contain diastereomerically pure phosphoro:thioate links for formation of more stable complexes with target nucleic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A4T51073-T51079 represent inhibitors of the invention. This sequence can be used in the treatment of cytomegalovirus retinitis. 75-100 % of the nucleotides in these sequences are preferably joined by either Sp or Rp phosphorothicate 3' links. To create these sequences, 2'-decxyribonucleoside-5'-0-(1-hiophosphate) (dNTPalphas) is prepared as a racemic mixture, and the pure Sp and Rp diastereomers are isolated (such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RNA transcription inhibitor; hepatitis C virus; HCV; inflammation; AIDS; phosphorothioate oligonucleotide; primer; nuclease; RNaseH; therapy; thermodynamic stability; cytomegalovirus infection; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
prevent human cytomegalovirus infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ISIS-2922, cytomegalovirus inhibitor.
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                                                                    Disclosure; Page 7; 31pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     130 CGGATGAAGAAGATCAAACG 149
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91US-00777007.
93US-00058023.
94US-00297703.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1997-011289/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-OCT-1991;
05-MAY-1993;
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13-MAR-1997
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT51074/
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as by reverse-phase HPLC on ODS Hypersil). The chiral products are then used to make these sequences enzymatically in the presence of a template, primer, and nuclease. Alternatively these sequences can be chemically synthesized. Oligonucleotides with chirally pure intersugar links form heteroduplexes with target RNA or DNA of greater thermodynamic stability pure oligonucleotides also have a better resistance to nuclease digestion. As these sequences inhibit HCV RNA transcription, they can be used as therapeutic, diagnostic, and research agents. More generally, therapeutic agents in the same way as racedic (or non-sulphur substituted) compounds, such as to treat AIDS, inflammation, cytomegalovitus infection, and various cancers. (Updated on 25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Inhibiting restenosis using oligonucleotide binding to cytomegalovirus nucleic acid - useful for, e.g. preventing cytomegalovirus replication particularly after angioplasty or atherectomy.
                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CMV; human; cytomegalovirus; restenosis; angioplasty; atherectomy; hybridisation; probe; oligomeric molecule; morpholino; HMCV;
                                                                                                                                                                                                                                                                                         0;
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/note= "preferably phosphoramidate linkages"
                                                                                                                                                                                                                                                        0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                              Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene oligomeric molecule probe #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                   130 CGGATGAAGAAGATCAAACG 149
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                                                                                                                                                                                                                                                                                                                                                 21 CGCAAGAAGAAGAGCAAACG
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                                                                                                                                                                                                                                                                                                                                                                                                                      AAV70321 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                      15: Similarity 85.0
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                                                                                                                                                                                               to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human herpesvirus 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           phosphoramidate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1998-594572/50.
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV70321;
                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                      Best_Loca
Matches
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The present invention describes a method for inhibiting restenosis, in subject infected with cytomegalovirus (OWV) who has undergone, or is undergoing, angioplasty or atherectomy. The method comprises administering an oligomucleotide that hybridises to at least part of a target sequence in a CMV gene. The oligonucleotide promises purine and

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pyrimidine bases that hybridise to corresponding bases in the target, connected by 5-7 attom cyclic backbone groups. The oligomocleotides are used to inhibit CWV replication, which is implicated in proliferation of smooth muscle cells. They are particularly administered at the site of mooth muscle cells. They are particularly administered at the site of right but oral and parental administration are also contemplated. Typically the dose is 1-25 (preferably 2-15) micro mole, or when included in a delivery device, 30000 (preferably 300-1500) micro g/cm2 of surface area being treated. Compared with sugar-based oligomucleotides, the oligomucleotide of the present invention have higher affinity for target RNA and better resistance to nucleases. Also the target. cligomucleotide duplex formed is not unwound in the cell and since the oligomucleotides from balloon catherers or stemts provides a high contentration at the target site. AAV70312 represent
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human galactokinase. This protein is used in a method to detect galactokinase mutations. This protein and its encoding nucleic acid can be used in methods allowing the detection, diagnosis and treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     specifically claimed examples of the oligonucleotides from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV62907-V62927 are PCR primers used in the amplification of a novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Galactokinase; human; mutation; detection; diagnosis; treatment;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 3 A; 9 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 15.2; DB 1
Pred. No. 6e+02;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human galactokinase cDNA PCR primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Col 35-36; 31pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21 CGCAAGAAGAAGAGCAAACG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV62909 standard; DNA; 21 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       deficiency: PCR primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US5830649-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV62909;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 399
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Matches

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the primers AAV60724-V60725 were used to PCR amplify codons 1-151 of the human cyclin-dependent kinase 2 (hcDK2). The amplified product was used to generate a fusion protein comprising part of the hcDK2 sequence linked to codons 155-302 of the yeast PHOSE gene. The fusion protein is used to screen for compounds that affect mammalian cell cycle regulatory comprises administering a compound to a cell line, which contains a reporter gene linked to an Upstream Activation Sequence (UAS) and a promoter, where the UAS binds a transcription control factor (TCF) which is regulated through cyclin/cyclin-dependent kinase (CDK) phosphorylation. Also included in the construct is an effector gene product to permit normal cyclin/CDK regulation of the converse determining whether the compound affects the normal regulation. The method can be used to identify inhibitors and activators of mammalian cell ns, CDKS, cyclin/CDK complexes, cyclin kinase inhibitors of cyclin/CDK/CKI complexes, cyclin kinase inhibitors of cyclin/CDK/CKI complexes, cyclin are needed for the complexes. The used to identify inhibitors and activators of cyclin/CDK/CKI complexes, cyclin kinase inhibitors (CKIS), and cyclin/CDK complexes. The identified agents can be used for
                                                         PCR primer; amplification, yeast, UAS; upstream activating sequence: transcription terminator; cell cycle; Upstream Activation Sequence; UAS; promoter; phosphorylation; cyclin; cyclin-dependent kinase; CDK; vector; cyclin kinase inhibitor; CKI; growth; wound healing; cancer therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Screening for agents that effect cell cycle regulatory proteins - 1 cell line that expresses a reporter gene in response to regulation through phosphorylation by a cyclin/CDK system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (as in wound healing), or regulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                stimulating growth of cells (as in wound healing), or recexcisive cell growth and division (as in cancer therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human TSC gene exon 10 forward primer hTSCex10.
                  Primer #2 for human CDK2 codons 1-151.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1033 GACTITGGCCTGGCCCGAGC 1052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 4; Page 68; 93pp; English.
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                                                                                                                                                                                                                                                                                                                                97WO-US018608.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-DEC-1998 (first entry)
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Les 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                     (BITT-) BITTECH INC
                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                         WO9816660-A1
                                                                                                                                                                                                                                                                                                                              16-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                          16-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                              27-NOV-1996;
                                                                                                                                                                                                                                                                                     23-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bitter GA;
                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      method of the invention. The specification describes a matrix that comprises a support and an affinity unit that specifically and reversibly binds a target oligonucleotide, and comprises a sequence of bases having the reverse complement of a hybridising portion of the target oligonucleotide. The matrix is used for affinity purification of synthetic oligonucleotides, specifically antisense agents, for treatment hyperproliferative disease, e.g. Alzheimer's, for modulating expression of cell surface proteins, and to inhibit a eukaryotic pathogen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV28155-268 represent oligonucleotides which can be purified using the
                                                                                                                                                                                                                                                                                                                                                                       Purification, oligonucleotide, matrix, affinity unit, Cytomegalovirus, affinity purification, antisense, influenza virus, CMV, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matrix for selective separation of oligo:nucleotide - useful for, e.g. large scale purification of anti-sense agents from their deletion derivatives formed during synthesis.
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  Gaps
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85.0%; Pred. No. 6e+02;
Live 0; Mismatches 3; Indels
Indels
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                                                                                                                                                                                                                                                                                                                                   Antisense oligonucleotide to Cytomegalovirus.
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 157; 183pp; English.
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                                             927 CCAGCTGCTCCGTGGCCTGG 946
                                                                                    21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGCAAGAAGAGAGCAAACG 2
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                                                                                                                                                                                                  AAV28268 standard; DNA; 21
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  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Srivatsa GS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-362922/31.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytomegalovirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SISI (-SISI)
                                                                                                                                                                                                                                                                                         08-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-DEC-1997;
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17;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
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                                                                                                                                                                                                                                              AAV28268;
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                                                                                                                                                                                                                                                                                                                                                                 Thiazide sensitive cotransporter and ATP sensitive potassium channel genes - useful for developing products for the diagnosis and treatment of ion transport disorders, e.g. Gitelman's Syndrome or Bartter's Syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  respectively) are designed to amplify exon 10 of the human hTSC gene (see AAV40561) that codes for thiazide-sensitive Na-Cl cotransporter TSC (see AAV29682). Both primers are located within introns of hTSC. 27 Sets of specific primers (see AAV40565-V40618) were used for SSCP analysis of hTSC. Amplified products were analysed for molecular variants by electrophoresis, and identified variants were sequenced. Complete linkage of Gitelman's syndrome with TSC was demonstrated. Identification of the molecular basis of Gitelman's syndrome allows for the genetic diagnosis of this disorder. The invention provides products and methods useful for diagnosis and treatment of Gitelman's syndrome and other ion transport
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
Thiazide-sensitive Na-Cl cotransporter; TSC; hTSC gene; human; ion transport; Gitelman's syndrome; Bartter's syndrome; hypokalaemic alkalosis; hypocalciuria; hypomagnesemia; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antisense; oligonucleotide; immediate early; DNA polymerase; CMV; cytomegalovirus; inhibition; replication; sugar modification; phosphorothioate; infection; retinitis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Primers hTSCex10 forward and reverse (see AAV40585 and AAV40586,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
iive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CMV target sequence in immediate early gene region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 9 A; 1 C; 10 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 51; 105pp; English
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                                                                                                                                                                                                   97WO-US023553,
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                                                  therapy; SSCP; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                   Lifton RP, Simon DB;
                                                                                                                                                                                                                                                                                                                                    WPI; 1998-388029/33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human herpesvirus 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                  (UYYA ) UNIV YALE.
                                                                                                  Homo sapiens
                                                                                                                                                                                                                                   31-DEC-1996;
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                                                                                                                                   W09829431-A1
                                                                                                                                                                                                  19-DEC-1997;
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                                                                                   Synthetic.
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                                                                                                                                                                                                                                       acid (AAXI7925-XI7948) encoding IE (immediate early) 1 or 2, or DNA polymerase of cytomegalovirus (CMV) and are able to inhibit CMV replication. The sequence shown here represents the target site in the IE2 gene region and corresponds to the nuclear localisation signal 2 sequence. Optionally the oligonucleotides include at least one 2' (2-methoxyrchoxy) sugar modification or phosphorothoate internucleotide methoxypcthoxy) sugar modification or phosphorothoate internucleotide linkages. The oligonucleotides are used to inhibit CMV infections (by in vivo or in vitro contact with cells, tissues or body fluids), especially to treat or prevent CMV infections, particularly retinitis
                                                                                                                                  New antisense oligonucleotides that target cytomegalovirus nucleic acid
                                                                                                                                                   particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina
                                                                                                                                                                                                                          Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nuclease resistant; ribofuranosyl moiety; 2'-aminoalkoxy; tumour; 2'-imidazolylalkoxy; modulation; activity; AIDS; atherosclerosis; phosphorothioate; DNA-RNA hybrid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          .,
                                                                                                                                                                                                                                                                                                                                                                                                                      0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CMV antisense chimeric oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 10 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
                                                                         Chapman S;
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"phosphorothioated"
                                                                        Kisner DL, Anderson KP,
                                                                                                                                                                                              Disclosure; Page 23; 99pp; English.
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90US-00566977.
91WO-US005720.
92US-00835932.
              97US-00838715
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Best Local Similarity 85.0°
Matches 17; Conservative
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                                          (ISIS-) ISIS PHARM INC.
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                                                                                                      WPI; 1998-568330/48.
              09-APR-1997;
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12-AUG-1991;
05-MAR-1992;
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16-APR-1999
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                                                                        Draper KG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
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16-FEB-1999

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The present oligonucleotide exemplifies the oligonucleotides of the invention. Oligonucleotides of the invention are nuclease resistant, and comprise covalantly-bound nucleosides that individually include a ribose or deoxyribose sugar portion and base portion where the nucleosides are joined together by internucleoside linkages such that the base portion of the nucleosides form a mixed base sequence that is complementary to a RNA base sequence. At least one of the nucleosides has a modified ribofuranosyl moiety bearing a 2'-aminoalkoxy or 2'- has a modified ribofuranosyl moiety bearing a 2'-aminoalkoxy or 2'- cused for modulating the activity of DNA or RNA. They can be used for treating organisms having a disease characterised by the undesired treating organisms having a disease characterised by the undesired protococoa, algae, plant and higher animal forms including warm-blooded animals can be treated in this manner. The compounds can be used for treating e.g. AIDS, atherosclerosis or tumours. They can also be used in diagnostic methods for detecting the presence or absence of abnormal RNA molecules, or abnormal or inappropriate expression of normal RNA molecules in organisms or cells. (Updated on 20-MAR-2003 to correct PR
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0
                                                                                                                            New 2'-0-modified oligo-nucleotide(s) - comprising nucleotide(s) comprising a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent, used for hybridisation to RNA or DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nuclease resistant; ribofuranosyl moiety; 2'-aminoalkoxy; tumour; 2'-imidazolylalkoxy; modulation; activity; AIDS; atherosclerosis; phosphorothioate; DNA-RNA hybrid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CMV antisense chimeric oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Seguence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= a
/note= "phosphorothioated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                  Example 34; Col 53; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 CGCAAGAAGAAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX15076 standard; DNA; 21 BP
92US-00854634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         85.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 85.0°
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15. .18
/*tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .20
/*tag=
                                 (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (revised)
                                                                  Kawasaki AM;
                                                                                                WPI; 1999-166721/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
modified_base
01-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-APR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX15076;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  misc_RNA
                                                                  Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         field.)
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The present oligonucleotide exemplifies the oligonucleotides of the invention. Oligonucleotides of the invention are nuclease resistant, and comprise covalently-bound nucleosides that individually include a ribose or decyribose sugar portion and base portion where the nucleosides are joined together by internucleoside linkages such that the base portion of the nucleosides form a mixed base sequence that is complementary to a RNA base sequence. At least one of the nucleosides has a modified ribofuranosyl moiety bearing a 2'-aminoalkoxy or 2'-a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protozoa, algae, plant and higher animal forms including warm-blooded animals can be treated in this manner. The compounds can be used for treating e.g. AIDS, atherosclerosis or tumours. They can also be used in diagnostic methods for detecting the presence or absence of abnormal RNA molecules, or abnormal or inappropriate expression of normal RNA
                                                                                                                                                                                                                                                                                 New 2'-O-modified oligo-nucleotide(s) - comprising nucleotide(s) comprising a 2'-aminoalkoxy or 2'-imidazolylalkoxy substituent, used for hybridisation to RNA or DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      molecules, or abnormal or inappropriate expression of normal RNA molecules in organisms or cells. (Updated on 20-MAR-2003 to correct PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     imidazolylalkoxy substituent. The nuclease resistant compounds can be used for modulating the activity of DNA or RNA. They can be used for treating organisms having a disease characterised by the undesired production of a protein. Diverse organisms such as bacteria, yeast,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Phosphorus-linked oligomer, deprotection; protic acid, ether solvent, hybridization probe, amplification primer, forensic, paleontology;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fully modified phosphorothioate oligo seq ID No: 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Seguence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                           Example 34; Col 53; 48pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21 CGCAAGAGAGAGAGAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВР
                                                                90US-00463358.
90US-00566977.
91WO-US005720.
92US-00835932.
                                95US-00471973.
                                                                                                                                       92US-00854634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ11589 standard; DNA; 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 85.0 es 17; Conservative
                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                               Kawasaki AM;
                                                                                                                                                                                                                                                 WPI; 1999-166721/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense agent; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9943694-A1.
                                06-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-NOV-1999
                                                                                    13-AUG-1990;
                                                                                                                                         01-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-SEP-1999
                                                                   11-JAN-1990,
                                                                                                       12-AUG-1991
                                                                                                                        05-MAR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                               Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAZ11589;
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 406
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(first entry)
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                                                        Example 3; Page 8; 17pp;
                                  nucleic acid chemistry.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
Human herpesvirus 5.
  WPI; 1999-287949/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                      20-APR-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                AAX05474
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                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     misc_RNA
                                                                                                                                                                                                                                                                                  Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                      RESULT 408
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                                                                                                                                                                         linked oligomers. The method comprises deprotectings a 5'-hydroxy using a protic acid in a aromatic, alkylaromatic, haloaromatic, haloaromatic, haloaromatic, haloaromatic, haloaromatic, haloaromatic, haloaromatic, haloaromatic, or aromatic ether solvent. The phosphorus-linked oligomers particularly oligomucleotides, are useful as diagnostic or research reagents, e.g. hybridization probes or amplification primers, useful in forensics, paleontology, evolutionary studies, for screening expression libraries, sequencing etc., or as therapeutic (antisense) agents for inhibiting expression of genes or activity of transcription factors. The aromatic solvents are less expensive to use than hazardous halogenated alkanes since they do not require large investments in recycling equipment to meet environmental standards for disposal. They are thus better sulted for large scale operations. Sequences AZXI1587-594 represent phosphorothioate oligomers synthesized using the new method of the invention
                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                         Use of aromatic solvents during deprotection of 5'-hydroxy groups in solid phase synthesis of oligonucleotides.
                                                                                                                                                                The invention provides improved methods for synthesis of phosphorus
                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                 Score 15.2; DB 1; Length 21; Pred. No. 6e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= a
/note= "phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Phosphorothioate; sulphurised oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Phosphorothioate 21-mer oligonucleotide #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ravikumar VT, Cheruvallath ZS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                            Example 5; Page 28; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                             130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                  21 CGCAAGAAGAAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAX33398 standard, DNA, 21 BP
99WO-US004213.
                    98US-00032972.
                                                                                                                                                                                                                                                                                                                                                                   0.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                Query Match 0.9
Best Local Similarity 85.0
Matches 17; Conservative
                                                                Ravikumar VT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                         (ISIS-) ISIS PHARM INC
                                                                                     WPI; 1999-540559/45
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modified_base
26-FEB-1999;
                   26-FEB-1998;
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                                                                Krotz AH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX33398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cole DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 407
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                                                                                                                                                                               The present invention describes a method for preparing phosphorothioate oligonucleotides by phosphitylating the 5'-hydroxyl of a nucleic acid moiety in an aceronitrile containing solvent mixture to form a phosphite intermediate (II) and oxidizing (II) with an acetyl disulfide in an acetonitrile containing solvent mixture to effect conversion of the intermediate to phosphorothioate (II). The present sequence represents a phosphorothioate oligonucleotide from an example of the present invention. The method can be used to sulphurise oligonucleotides of 8-50 nucleotides. The method is widely applicable throughout nucleic acid chemistry. The process allows formation of phosphorothioate linkages in the oligonucleotides or derivatives, without the need for complex solvent mixtures and repeated washing or solvent changes. The process uses a simplified solvent system and produces oligonucleotides having
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nuclease resistant; modified; deoxyfuranosyl moiety; therapy; infection; AIDS; atherosclerosis; tumour; CMV; antisense; DNA/RNA hybrid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag= a /note= "contains phosphorothioate linkages; 2' O-methyl modification on some base pairs"
Preparation of Phosphorothioate oligonucleotides applicable throughout
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  phosphorothioate groups with efficiency and improved yields
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chimeric 2'-0-methyl antisense oligo 4326 for CMV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              130 CGGATGAAGAAGATCAAACG 149
                                                                                                                       English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 CGCAAGAAGAAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX05474 standard; DNA; 21 BP
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WPI; 1999-120005/10
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The invention relates to a nuclease resistant compound that hybridises with RNA or DNA. The compound comprises covalently-bound nucleosides that individually include a ribose or deoxyribose sugar portion and a base cortion, where the nucleosides are joined together by internucleoside individually include a ribose or deoxyribose sugar portion and a base control, where the nucleosides form a mixed base sequence that is complementary to a RNA base sequence or to a DNA base sequence, and where at least 1 of the nucleosides includes a modified deoxyfuranosyl moiety bearing a 2' substituent selected from cyano, fluoromethyl, thioalkoxyl, alkylsulphinyl, alkylsulphonyl, allyloxy and deoxyfuranosyl moiety bearing a 2' substituent selected from cyano, fluoromethyl, thioalkoxyl, alkylsulphinyl, alkylsulphonyl, allyloxy and cand modulate the activity of DNA or RNA and can be used for treating organisms having a disease characterised by the undesired production of a protein. They can be used in therapeutic or prophylactic treatment in corganisms such as bacteria, yeast, protozoa, algae, plant and higher animal forms including warm-blooded animals. The ONS can also be used for tereating infections, AIDS, atherosclerosis or tumours. The products can consider superior potency and specificity compared to phosphorus-modified only of provides superior potency and specificity compared to phosphorus-modified only of a provide superior potency and specificity compared to phosphorus-modified only of a considered only 
Nuclease resistant oligonucleotide analogues - having nucleosides including modified deoxyfuranosyl moiety bearing 2'-substituent to
                                                                                                                                                                                                                                                                                                                                                              Example 34; Col 54; 49pp; English.
                                                                                                                                                                                                 increase binding affinity.
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Gaps .; 0 3; Indels Score 15.2; DB 1; Length Pred. No. 6e+02; Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other; 0; Mismatches CGGATGAAGAAGATCAAACG 149 CGCAAGAAGAGAGCAAACG 2 0.9%; Conservative Local Similarity nes 17; Conserv 21 Query Match Matches 8 d

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Chimeric 2'-0-methyl antisense oligo 4325 for CMV. AAX05473 standard; DNA; 21 (first entry) Human herpesvirus 5. 20-APR-1999 Synthetic. AAX05473 RESULT 409 AAX05473/(
11D AAX0
X AC AAX0
XX AXX
DT 20-A
XX NUCl
XX NUCl
XX NUCl
XX SYDE,
OS HUMA
XX SYDE,
CF FF Misc,
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XX YX YX USS8
XX YX USS8

Nuclease resistant; modified; deoxyfuranosyl moiety; therapy; infection; AIDS; atherosclerosis; tumour; CMV; antisense; DNA/RNA hybrid; ss. Location/Qualifiers 1. .21 /\*tag= Key modified\_base

/\*tag= a //note= "contains phosphorothioate linkages; 2' O-methyl modification on some base pairs" ф .21 US5859221-A misc\_RNA

90US-00463358. 90US-00566977. 91WO-US005720. 95US-00468037 11-JAN-1990; 13-AUG-1990; 12-AUG-1991; 06-JUN-1995;

12-JAN-1999

The invention relates to a nuclease resistant compound that hybridises with RNA or DNA. The compound comprises covalently-bound nucleosides that individually include a ribose or deoxyribose sugar portion and a base portion, where the nucleosides are joined together by internucleoside linkages such that the base portion of the nucleosides form a mixed base sequence that is complementary to a RNA base sequence or to a DNA base sequence; and where at least 1 of the nucleosides includes a modified deoxyfuranosyl moiety bearing a 2' substituent selected from cyano, fluoromethyl, thicalkoxyl, alkylsulphinyl, alkylsulphonyl, allyloxy and alkeneoxy groups. The nuclease resistant oligonucleotides (ONS) can bind to and modulate the activity of DNA or RNA and can be used for treating organisms having a disease characterised by the undesired production of protein. They can be used in therapeutic or prophylactic treatment in organisms such as bacteria, yeast, protozoa, algae, plant and higher animal forms including warm-blooded animals. The ONS can also be used for treating infections, AIDS, atherosclerosis or tumours. The products can be used for detection and diagnosis. The ONS provide enhanced binding to targets. Increased binding of 2'-sugar modified sequence-specific ONS provides superior potency and specificity compared to phosphorus-modified ONS. The present sequence represents a chimeric antisense oligo for CMV Nuclease resistant oligonucleotide analogues - having nucleosides including modified deoxyfuranosyl moiety bearing 2'-substituent to increase binding affinity. Seguence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other; Example 34; Col 54; 49pp; English. 92US-00854634. 92US-00835932. (ISIS-) ISIS PHARM INC Cook PD, Kawasaki AM; WPI; 1999-120005/10. 05-MAR-1992; 01-JUL-1992; 

Gaps 0 0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; Indels 0; Mismatches 17; Conservative Query Match Best Local Similarity Matches

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130 CGGATGAAGAAGATCAAACG 149 21 cechagadadadededaded 2 δ g

BP

AAX99984 standard; DNA; 21

RESULT 410 AAX99984/ 19-OCT-1999 (first entry)

AAX99984;

Phosphorothioate oligonucleotide; benzyl (thio) phosphite residue; primer; benzyl(thio)phosphoramidite; probe production; linker; adapter; Phosphorothioate oligonucleotide #3. Location/Qualifiers gene fragment; ss Synthetic THE SECOND SECON

a "phosphorothicate backbone" /\*tag= /note= ' Key modified base WO9940101-A1

12-AUG-1999

99WO-US002474. 09-FEB-1999;

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This sequence represents a phosphorothioate oligonuclectide synthesised using the method of the invention. The method is for the preparation of oligonucleotides containing a substituted benzyl(thio)phosphite residue comprises reacting an (oligo)nucleotide with a 3' substituted benzyl(thio)phosphoramidite with an (oligo)nucleotide having a free 5'-hydroxy, with one of the reactants, optionally immobilised on a solid phase. The method is used to prepare oligonucleotides, or analogues, for use as probes, primers, linkers, adapters or gene fragments, for diagnostic or therapeutic use, or a research reagents. The specified substituted benzyl group can be eliminated without release of toxic acrylonitrile (contrast conventional 2-cyanoethoxy protecting groups)
                                                                                                                                         Oligonucleotide synthesis using substituted benzyl phosphoramidite for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cellular adhesion protein; proliferation; antisense oligonucleotide; alimentary canal; transport; gastrointestinal mucosa; cancer; Alzheimer's disease; beta-thalassemia; malaria; viral infection; HIV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                ch 0.9%; Score 15.2; DB 1; Length 21; 1. Similarity 85.0%; Pred. No. 6e+02; 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Target cytomegalovirus antisense oligonucleotide ISIS 2922.
                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                           reaction with synthon having free 5'-hydroxy.
                                                                                                                                                                                         Example 12; Page 47; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGCAAGAGAGAGCAAACG 2
               98US-00021277.
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                                                                            Ravikumar VT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-MAY-1999 (first entry)
                                             (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC
                                                                                                          WPI; 1999-508484/42
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         inflammation;
               10-FEB-1998;
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                                                                           Capaldi DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        W09901579-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUL-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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ВЪ

Composition comprising nucleic acid and penetration enhancer - used particularly for delivering therapeutic antisense oligonucleotides across the gastrointestinal mucosa, provides high bioavailability.

Example 2; Page 112; 115pp; English

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Gaps ·.

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A pharmaceutical composition has been developed which comprises a nucleic acid and at least one penetration enhancer. The compositions are used:

(i) to treat or prevent any disease or disorder that can be treated with the nucleic acid, e.g. cancer, Alzheimer's disease, beta-thalassemia, malaria, viral infections (including human immune deficiency virus (INIV), inflammation, in human or animal medicions; (ii) to investigate the role of a gene or gene product in non-human animals; and (iii) to modulate gene expression in cells, tissues or organs. The compositions provide bioavailability of at least 15, preferably 17-35.\frac{1}{3}. The penetration enhancer improves: (i) transport of the nucleic acid across the mucosa of the alimentary canal and into cells; and (ii) increases stability of the nucleic acid. Oral administration avoids the complications and expense of intravenous or other methods of administration. AAX18669 to AAX18769 and AAX18801 represent antisense or organs in the method of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified antisense oligonucleotide with increased bioavailability after oral delivery - has heteroatomic backbone modification or 2'-modified sugar, useful for diagnosis and therapy, e.g. of tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mouse; protein kinase C-alpha; PKC-alpha; antisense oligonucleotide; phosphorthioate; enhanced bicavailability; oral delivery; diagnosis; heteroatomic backbone modification; 2' modified sugar; tumour; autoimmune disease; inflammation; graft vs. host disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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0
                                                                                                                                                                                                                                                                                                                                                      0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Anderson KP,
                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= a
/note= "phosphorothioate linkages"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2'-MOE gapped version of fomivirsen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                            130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page 37; 54pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 CGCAAGAAGAAGAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV72643 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98WO-US008798
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-FEB-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 85.0'
Marches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human herpesvirus 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-009446/01.
                                                                                                                                                                                                                                                                                   the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9849348-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 412
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The present invention describes oligonuclectides having: (a) at least one heteroatomic backbone modification or at least one 2'-sugar modification; and (b) during or after administration.
                                                                                                                                                                                                       'n
                                                  bloavailability than the corresponding phosphorothicate oligodeoxynucleotide. Also described are compositions containing the oligomeleotides having at least one 2'-alkoxyalkoxy sugar modification and at least one 5-methylcytidine (5MeC) residue. The oligomucleotides are antisense oligomucleotides for modulating expression of target genes for diagnostic or therapeutic purposes, e.g. in cases of tumours, autoimmune disease and inflammation, including graft vs. host disease. The specified modifications increase bloavailability from the digestive tract, eliminating the need for intravenous or other routes of administration. The present sequence represents an antisense oligomucleotide which is used in example to examine the effect of 2' modifications on bioavailability after gastrointestinal administration in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense oligonucleotide; CMV replication; nuclease resistance; RNAse H strand cleavage; phosphorothicate; oligonucleotide therapeutic; AIDS; atherosclerosis; DNA/RNA hybrid; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oligonuclectides eliciting RNAase H activity useful for diagnosis and treatment of diseases e.g AIDS or atherosclerosis.
                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                      Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                               21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligonucleotide used to inhibit CMV replication.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 17; Col 27; 34pp; English
                                                                                                                                                                                                                                                                                                                             130 CGGATGAAGAAGATCAAACG 149
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                                                                                                                                                                                                                                                                                                                                                                                                                          BP
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                                                                                                                                                                                                                                                                       Match 0.9%;
Local Similarity 85.0%;
nes 17; Conservative
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17. .21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (revised)
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08-NOV-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAZ10306;
                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc_RNA
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The present sequence represents a phosphorothioate antisense

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            replication. The oligonucleotide is a gapped 2' modified oligonucleotide, whereby one part has at least two consecutive 2'-F (2'-H) nucleotides and the second part has at least five consecutive nucleotides with 2'-H sugar moieties. The modified oligonucleotide has increased nuclease resistance, and increased binding affinity for substrates. The oligonucleotide electric RNAse H strand cleavage of specific RNAs. Oligonucleotides of the invention are useful for the diagnosis, detection and treatment of conditions susceptible to oligonucleotide therapeutics (e.g. AIDS and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antisense oligonucleotide; CMV replication; nuclease resistance;
RNAse H strand cleavage; phosphorothioate; oligonucleotide therapeutic;
AIDS; atherosclerosis; DNA/RNA hybrid; ss.
                                                                                                                                     atherosclerosis). (Updated on 20-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oligonucleotides eliciting RNAase H activity useful for diagnosis and treatment of diseases e.g AIDS or atherosclerosis.
                                                                                                                                                                                                                                                                 Gaps
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0
oligonucleotide used to inhibit cauliflower mosaic virus (CMV)
                                                                                                                                                                                                                          Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                             Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide used to inhibit CMV replication.
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                                                                                                                                                                                                                                                                                                   130 CGGATGAAGAAGATCAAACG 149
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94US-00244993
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Best Local Similarity 85.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (revised)
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                                                                                                                                                                                                                                                                                                                                                                                         RESULT 414
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Gaps

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This invention describes a novel composition comprising a number of sensor arrays, where each array comprises a unique probe oligonucleotide, which is the reverse complement of part of a unique trarget of larves complement of target deletion sequence oligonucleotides. The compositions form a method for characterizing a sample of target deletion oligonucleotides which are labelled and hybridize with the probe oligonucleotides which are labelled and hybridize with the probe oligonucleotides of the method form pharmaceutical oligonucleotides and their targets are represented in AAX23548 x23709. Oligonucleotides and their targets are represented in AAX23548 x23709. Oligonucleotides and their targets are represented in AAX23548 x23709. Oligonucleotides and their targets are represented in AAX23509. Compositions that are useful for modulating cellular adhesion or proliferation, and being active against a eukaryotic pathogen, a human retrovirus, including influenza virus, Epstein-Barr virus, Respiratory Syncytial Virus or cytomegalovirus (CWV). The compositions enable characterization of deletion sequence oligonucleotides having related,
elicits RNase H strand cleavage of specific RNAs. Oligonucleotides of the invention are useful for the diagnosis, detection and treatment of conditions susceptible to oligonucleotide therapeutics (e.g. AIDS and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Also, if the specificity of the oligonucleotide's nucleobase sequence for its reverse complement is not modified, the method may be performed using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New compositions comprising sensor arrays made up of unique probe oligonucleotides - useful for characterizing a sample of target deletion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    but different nucleobase sequences, and quantification of different species of deletion sequence ("target") oligonucleotides in a mixture.
                                        atherosclerosis). (Updated on 20-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen; probe; cellular adhesion modulator; cellular proliferation modulator; human retrovirus; human retrovirus;
                                                                                                                                                                                                  .
0
                                                                                                                                                   ch 0.9%; Score 15.2; DB 1; Length 21; l Similarity 85.0%; Pred. No. 6e+02; 17; Conservative 0; Mismatches 3; Indels
                                                                                                            Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Deletion sequence oligonucleotide 131.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 9; Page 145; 163pp; English.
                                                                                                                                                                                                                                         130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                  21 CGCAAGAGAAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                 ВР
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                                                                                                                                                                                                                                                                                                                                                                                               AAX23678 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Srivatsa GS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          oligodeoxymucleotides
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                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oligonucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HIV; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9911820-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX23678;
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                                                                                                                                                                                                                                                                                                                                                      RESULT 415
                                                                                                                                                                                                Matches
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    8×30000
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which is the reverse each array comprises a unique probe oligonuclectic, which is the reverse complement of part of a unique probe oligonuclectide, which is the reverse complement of part of a unique target oligonuclectides. The compositions form a method for characterizing a sample of target deletion oligonuclectides which are labelled and hybridize with the probe oligonuclectides with a respect and their targets are represented in AAX33548.X3709. Oligonuclectides and their targets are represented in AAX33548.X3709. Compositions that are useful for modulating cellular adhesion or proliferation, and being active against a eukaryotic pathogen, a human immunodeficiency virus (HIV), or a non-human retrovirus, including influenza virus, Epstein-Barr virus, Respiratory Syncytial Virus or cytomegalovarus (CWV). The compositions enable characterization of deletion sequence oligonucleotides having related, but different nucleobase sequences, and quantification of different species of deletion sequence ("target") oligonucleotides in a mixture. Also, if the specificity of the oligonucleotides in a mixture.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New compositions comprising sensor arrays made up of unique probe oligonuclectides - useful for characterizing a sample of target deletion oligonuclectides.
                                                                                                                                                                                                                                                                                                                                                                                                          Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen; probe; cellular adhesion modulator; cellular proliferation modulator; human retrovirus; human immunodeficiency virus; non-human retrovirus;
                                                                                           Gaps
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0
                                                    DB 1; Length 21;
                                                                                         Indels
               Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
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                                                                                       3;
                                                0.9%; Score 15.2; DB 1
85.0%; Pred. No. 6e+02;
live 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                       Deletion sequence oligonucleotide 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 89; 163pp; English.
                                                                                                                              130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                 21 CGCAAGAAGAAGACG 2
                                                                                                                                                                                                                                                            AAX23548 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98WO-US018084.
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                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC.
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                                                                Local Similarity
nes 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HIV; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
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                                                    Query Match
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                                                                                                                                                                                                                       RESULT 416
                                                                                       Matches
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DB 1; Length 21;

0.9%; Score 15.2;

Query Match

Sequence 21 BP; 6 A; 4 C; 9 G; 2 T; 0 U; 0 Other;

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virus infection, genetic diseases e.g. Duchenne's muscular dystrophy and Down's syndrome; degenerative diseases e.g. encephalopathy, dementia, Alzheimer's disease, Parkinson's disease, neuropathy, cardiomyopathy, aging, Kearn's Sayre syndrome, retinitis pigmentosa, ataxia, seizures, proximal muscle weakness, Leber's hereditary optic neuropathy, optic neuritis, and radiation damage; neoplasia, e.g. lympho-proliferative diseases, lymphomas, Kaposi's sarcoma, panceatic cancer, neuroblastoma, leukemia, bladder carcinoma, breast cancer, skin cancer, lung cancer, and colon cancer; and skin diseases, e.g. molluscum contagiosum, bacillary angiomatosis, seborrheic dermatitis, psoriasis, Reiter's syndrome, insect and in actual cancer and colliculitis. Bosinophilic folliculitis. In addition a drug resistance can be treated via administering the nucleic acid components of defibrotide and the variants in combination with the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotides AAV99271-80 represent modified defibriotide sequences containing a Human immunodeficiency virus (HIV) homology region and a cellular regulatory factor. Defibriotide is a polyanion malt of decoxyribonucleic acid obtained from mammalian tissue. The products can be used for treating diseases such as infectious disease such as HIV infection, protocoan infection, excistosoma infection e.g. Schistosoma japonicum, Schistocerca Leishmania infection, Trypanasoma infection e.g. Trypanosoma Cruzi, and fungus infection e.g. Candida tropicalis and candida Abbicans, Aspergillus infection, Promunosystis carrini infection, malaria, Plasmodium vivax, gram negative bacterial infection, cytomegalovirus infection, Human papilloma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Use of defibrotide nucleic acid components - for treating e.g. infectious diseases, genetic diseases, degenerative diseases, DNA damage, neoplasia and skin disease, particularly HIV infection.
                                                                                                                                                                                                                                                                                                                                                                                                 Schistocerca Leishmania; Trypanasoma; fungus infection;
Pneumocystis carinii; malaria; viral infection; genetic disease;
Duchenne's muscular dystrophy, Down's syndrome; degenerative disease;
neoplasia; cancer; skin condition; drug resistance; ss.
                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                defibriotide; polyanion salt; HIV; protozoan infection; schistosoma;
                                                                                                                                                                                                                                                                                                                                    HIV 5' UTR homology region and cellular regulatory factor (c-abl).
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0
                     Indels
                     3;
Pred. No. 6e+0
0; Mismatches
                                                               130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 33; Page 84; 96pp; English
                     0;
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                                                                                                      CGCAAGAAGAGAGCAAACG 2
                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human immunodeficiency virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98WO-US008357
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82.08;
                                                                                                                                                                                                           AAV99279 standard; DNA; 21
                                                                                                                                                                                                                                                                                            09-MAR-1999 (first entry)
Best Local Similarity 85.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                    21
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                                                                                                                                                                    RESULT 417
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New pro-cationic lipid compounds useful as components of liposomes used as vehicles for delivering pharmaceutical agents into cells.
                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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85.0%; Pred. No. 6e+02;
iive 0; Mismatches 3; Indels
            DB 1; Length 21;
                                        Indels
                                                                                                                                                                                                                                                                                                Phosphorothioate, lipid, liposome, drug deliver, ss.
                                        3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                          6e+02;
         0.9%; Score 15.2; E
85.0%; Pred. No. 6e+0
iive 0; Mismatches
                                                                                                                                                                                                                                                                   Phosphorothioate oligonucleotide ISIS-2922.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 31; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       130 CGGATGAAGAAGATCAAACG 149
                                                                       950 ACTGCCACCGGCAGAAGGTG 969
                                                                                                   1 Agricca Accederace action 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGCAAGAAGAGAAACG 2
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                                                                                                                                                                             AAC62738 standard; DNA; 21
                                                                                                                                                                                                                                     (first entry)
                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   which reduces toxicity
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es 17; Conserv
                       Local Similarity
es 17; Conserv
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                                                                                                                                                                                                                                                                                                                              Unidentified.
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                                                                                                                                                                                                                                       05-FEB-2001
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                                                                                                                                                                                                           AAC62738;
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              Query Match
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                                                                                                                                               RESULT 418
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                                           Matches
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12-OCT-2000

Leamon CP;

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Reporter probes AAC61629-32 were used to detect human lymphotoxin gene alleles. The method of the invention was used for detecting single uncleotide polymorphisms (SNPs) in the lymphotoxin gene. The method utilises electronic circuitry on silicon microchips. The method provides accurate discrimination of amplified DNA samples following electronic transport, concentration, and attachment of DNA to selected electrodes (test sites). The test sites make up organised arrays of samples that are distinguished by using internal controls of dual labelled reporters comprising wild type and mismatched sequences to validate the SNP genotype. Multiples of SNPs in target nucleic acids from a patient sample sources can also be detected using the electronically addressable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antisense inhibitor; oligonucleotide delivery agent; erythema multiforme; expression modulator; cellular adhesion protein; malignant melanoma; cellular proliferation modification; toxic epidermal necrolysis; psoriasis; lichen planus; carcinoma; Paget's disease; Kaposi's sarcoma; pulmonary fibrosis; Lyme disease; infection; therapy; HCMV; ss.
                                                                                                                             Detecting single nucleotide polymorphism by utilizing a bioelectronic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New oligonucleotide compositions for topical delivery, used for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.9%; Score 15.2; DB 1; Length 21;
15.0%; Pred. No. 6e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New oligonucleotide compositions for topical delivery, used
                                            Chanock SJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tsai YJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 21 BP; 1 A; 8 C; 3 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ecker DJ,
                                            Foster CB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HCMV antisense inhibitor, ISIS-2922.
                                                                                                                                                   microchip having several test sites.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1688 TCTTCCCTGCTTACTCTCTG 1707
                                                                                                                                                                                           Example 3; Page 17; 46pp; English
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                                            Wu DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAZ48640 standard; DNA; 21 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cellular adhesion protein.
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Matches 17; Conservative
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                                            Dillon PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hardee GE,
  (NANO-) NANOGEN INC
                                                                                       WPI; 2000-638354/61.
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                                            Giles PN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     microchip
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ48640;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 421
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present oligonucleotide is given in a specification disclosing a new lipid compound and its salts, solvates and hydrates. The compound comprises a hydrophobic tail part covalently linked to a hydrophilic head part. A region proximal to the hydrophobic tail part has a net positive charge at physiological pH and a region distal to the hydrophobic tail part has a net negative charge at physiological pH. A disulphide bond connects the regions. The lipid compound is useful for the construction of liposomes used as vehicles for delivering pharmaceutical agents into cells. The lipids and liposomes are fusogenic with membranes and deliver pharmaceutical agents to tissues or cells without inherent aggregation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New pro-cationic lipid compounds useful as components of liposomes used as vehicles for delivering pharmaceutical agents into cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatch reporter probe used to detct human lymphotoxin gene alleles.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
Live 0; Mismatches 3; Indels
                                                                                  Phosphorothioate; lipid; liposome; drug deliver; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; lymphotoxin; bioelectronic microchip;
                                          Phosphorothicate oligonucleotide ISIS-13312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          single nucleotide polymorphism; probe; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 31; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             130 CGGATGAAGAAGATCAAACG 149
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                                                                                                                                                                                                                                                          06-APR-2000; 2000WO-US009473.
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(first entry)
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Best Local Similarity 85.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                               4PI; 2000-679320/66
                                                                                                                                                                       WO200059474-A1
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05-FEB-2001
                                                                                                                                                                                                                                                                                                  06-APR-1999;
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                                                                                                                             Unidentified
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Gaps

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Templin MV;

05-OCT-2000

AAC61632;

RESULT 420 AAC61632

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This sequence represents an antisense inhibitor of HCWV. The invention relates to a pharmaceutical composition comprises an oligonucleotide (ON) admixed with a topical delivery agent. The compositions can be used for the delivery of a ribozyme, an external guide sequence, an antisense ON, an antisense peptide mucleic acid, an aptamer or a molecular decoy. The ONS can be used to modulate expression of a cellular adhesion protein or modulate a rate of cellular proliferation. The compositions can also be used to treat psoriasis. They can also be used to treat psoriasis are carcinoma, squamous cell carcinoma, malignant melanoma, paget's disease, carcinoma, squamous cell carcinoma, malignant melanoma, paget's disease, bacterial infections of the skin. They can be used to treat humans and primates, avians including chickens and turkeys, domestic household, sport or farm animals including rats, mice, rabbits and guinea pigs, tish, reptiles and zoo animals. The compositions and methods may also be used to examine the function of various proteins and genes in vitro in cultured or preserved dermal tissues and in animals

Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

DB 1; Length 21; Score 15.2; DB 1; Leus.-Pred. No. 6e+02; 0; Mismatches 130 CGGATGAAGAAGATCAAACG 149 CGCAAGAAGAGGCAAACG 2 0.9%; 17; Conservative Query Match Best Local Similarity 21 Matches ð g

RESULT 422

AAA39246 standard; DNA; 21 AAA39246; AAA39246 THE STATE OF THE S

BP.

07-SEP-2000 (first entry)

Mouse type II hair keratin clone pmKII-6 3'-noncoding region PCR primer.

Hair; keratin; hair cleansing composition; pre-shampoo; shampoo; conditioning rinse; hair styling; gel; spray; mousse; dyeing; bleaching; tinting; nail care product; nail polish remover; nail polish; PCR primer;

Mus sp.

WO200023039-A2

27-APR-2000.

99WO-US024426. 18-OCT-1999; 98US-00174186 16-OCT-1998;

Д (ENSL/) ENSLEY

Ensley BD;

WPI; 2000-339487/29.

Formulating hair treatment composition useful for producing hair preparations for improved hair characteristics by using human keratin allelic variants, which has not been cross-linked.

Example 3; Page 43; 55pp; English.

The present invention describes a method for formulating a hair treatment composition by using non-naturally occurring human keratin protein which has not been previously cross-linked. The method is useful for producing hair treatment composition for improved hair characteristics, and hair treatment preparations tailored to an individual's preference. The keratin is added to hair cleansing compositions, e.g. pre-shampoo,

shampoo, or conditioning rinse, to hair styling or shaping compositions, e.g. gel, spray or mousse, or in hair dyeing, bleaching or tiniting compositions. It may also be used in developing nail care products, such as nail polish and nail polish remover. The method provides hair treatment preparations tailored to the individual's preferences as well as to the manufacturers' preferences of hair treatment compositions. The present sequence represents a PCR primer for the murine type II hair keratin clone pmXII-6 3'-noncoding region, which is used in an example from the present invention 22222222222222

Sequence 21 BP; 3 A; 7 C; 8 G; 3 T; 0 U; 0 Other;

Gaps o, 0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; iive 0; Mismatches 3; Indels Local Similarity 85.0 nes 17; Conservative Query Match Matches

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> à g

RESULT 423

BP. AAZ40364 standard; DNA; 21 AAZ40364/

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Gaps

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AAZ40364;

(first entry) 02-MAR-2000

Antisense oligonucleotide; inhibitor; pulmonary delivery composition; gene expression modulation; asthma; lung cancer; pulmonary fibrosis; rihorvirus; tuberculosis; bronchitis; pneumonia; pulmonary disorder; viral disease; obstructive lung disorder; pulmonary embolism; emphysema; anaphylaxis; chronic obstructive pulmonary disease; CODD; bronchiectasis; chronic bronchitis; cystic fibrosis; therapy; HCMV; ss. Antisense inhibitor of HCMV, ISIS-2922.

WO9960010-A1.

25-NOV-1999

99WO-US011214. 20-MAY-1999;

98US-00083585. 21-MAY-1998;

(ISIS-) ISIS PHARM INC 

Cook PD; Ecker DJ, Bennett CF,

WPI; 2000-062437/05.

Composition for pulmonary delivery useful for treating and diagnosing pulmonary diseases such as asthma, tuberculosis, etc.

Claim 54; Page 33; 85pp; English.

This sequence represents an antisense inhibitor of HCMV. The invention relates to a pharmaceutical composition (C) for pulmonary delivery of an oligonucleotide, comprising at least one oligonucleotide or its bioequivalent. (C) can be used to investigate the role a of gene or gene product in an animal other than human. (C) is also useful in a method of modulating the expression of a gene in an animal. (C) is useful in treating or diagnosting asthma, lung cancer, pulmonary fibrosis, rhinovirus, tuberculosis, bronchitis, pneumonia. The oligonucleotides are useful in determining the nature, function and potential relationship to body or disease status in animal of various genetic components of the body. (C) is useful for therapeutic, palliative or prophylactic treatment or to prevent the onset or recurrence of the diseases associated with pulmonary disorders. (C) is also useful in the treatment of diseases caused by viruses (such as respiratory syncytial virus, Hemophilus

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influenza, parainfluenza, etc.), obstructive lung disorders (such as pulmonary embolism or anaphylaxis), chronic obstructive pulmonary disease (COPD), emphysema, chronic bronchitis, bronchiectasis and cystic fibrosis. (C) administered through pulmonary delivery overcomes the complication and expenses associated with other routes of administration. Modified or substituted oligonuclectides have enhanced cellular uptake, target binding and increased stability in the presence of nucleases. Pulmonary administration of phosphodiester oligonuclectides lowers the level of nuclease activity in lung tissue to afford phosphodiester oligonucleotides longer lifetimes in lung tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pulmonary delivery of an oligonucleotide comprising at least one oligonucleotide where the sugar moiety of at least one nucleoside unit of the oligonucleotide is not a 2'-deoxyribofuranosyl sugar moiety or at least one internucleotide linkage within the oligonucleotide is not a phosphodiester or a phosphotinoate linkage. The composition is useful for treating an animal having or suspected of having a disease or a disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Phosphorothioate; antisense oligonucleotide; HCMV; pulmonary delivery; asthma; lung cancer; pulmonary fibrosis; cytostatic; antiasthmatic; antiviral; ruberculosis; bronchitis; pneumonia; anaphylaxis; respiratory synctial virus; parainfluenza; obstructive lung disorder; pulmonary embolism; chronic obstructive pulmonary disease; COPD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pharmaceutical composition useful for pulmonary delivery of gonucleotide for treating asthma, lung cancer and pulmonary fibrosis.
                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           emphysema; chronic bronchitis; bronchiectasis; cystic fibrosis; ss.
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                                                                                                                                                                                                                                                                                       0
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Pred. No. 6e+02;
0; Mismatches 3; Indels
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                                                                                                                                                                                                             Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                             130 CGGATGAAGAAGATCAAACG 149
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nes 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human herpesvirus 5.
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modified_base
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                                                  influenzae, parainfluenza, obstructive lung disorders e.g. pulmonary influenzae, parainfluenza, obstructive lung disorders e.g. pulmonary emphysem, chronic obstructive pulmonary disease (COPD), emphysem, chronic bronchitis, bronchictasis and cystic fibrosis. The oligonuclectides are also useful for determining the nature, function and potential relationship to body or disease states in animals or various genetic components of the body. Pulmonary administration of an antisense oligonuclectide bypasses the complications and expense associated with intravenous and other routes of administration providing enhanced delivery of the oligonuclectides. The modified oligonuclectides have enhanced callular uptake, enhanced binding to target and increased stability in the presence of nucleases. The present sequence represents an antisense oligonuclectide used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New liposome compositions having long plasma half-lives, used for delivering compounds for treating e.g. tumors, inflammation or autoimmune
   asthma, a cancer of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes a liposome (I) which has a plasma half-life of at least 5 hours and comprises at most 10 mol \$ of a
that is treatable with one or more nucleic acids e.g. asthma, a cancer the lung, pulmonary fibrosis, rhinovirus, tuberculosis, bronchitis or pneumonia and other lung disorders e.g. respiratory synctial virus, H.
                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense oligonucleotide, phosphorothioate, inhibition, liposome, long-circulating liposome, anticancer, anti-inflammatory, tumour; inflammation; autoimmune disease, cytostatic, immunosuppressive;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HCMV targeting antisense oligonucleotide ISIS-2922 SEQ ID NO:2.
                                                                                                                                                                                                                                                                                                                                                     / Match 0.9%; Score 15.2; DB 1; Length 21; Local Similarity 85.0%; Pred. No. 6e+02; les 17; Conservative 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                 130 CGGATGAAGAAGATCAAACG 149
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                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 0 A; 6 C; 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human herpesvirus 5.
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modified_base
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                                                                                                                                                                                                                                                                                   invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 425
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prospective to the liposomes can be used to encapsulate a bioactive agent, e.g. an anticancer agent, an anti-inflammatory agent, an oligomucleotide (such as a hemimer, molecular decoy or an aptamer) or antisense compound (such as a ribozyme, an external guide sequence, a compound comprising at most synthetic molecy which has nuclease activity, an antisense peptide nucleic acid, an antisense nucleotide and/or comprising a sequence that hybridises to a nucleotide sequence present in a viral gene, ras gene or a gene encoding a cellular adhesion molecule). Such liposomes can be used for: (1) preventing cancer or reducing the rate of growth of a tumour or cancer in a mammal, (2) preventing or reducing the severity of inflammation in a mammal (sepecially a human); (3) modulating expression of a gene by contacting cells, tissues, organs, reducing the rate of progression of or reducing the severity of symptoms caulting from an autoimmune disease in a mammal. The liposomes have long circulating half-life in mammalian plasma. AA448119 the liposomes for circulating half-life in mammalian plasma. AA448119 to the control of the circulating half-life in mammalian plasma.
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(PG) compound that has a fatty acid portion of 10 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antisense oligonucleotide sequences used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Viral infection; expression; modulation; antisense; non-parenteral; delivery; uptake; administration; emulsion; ulcerative colitis; Crohn's disease; inflammatory bowel disease; cellular proliferation;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mod_base= OTHER
/note= "Phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    130 CGGATGAAGAAGATCAAACG 149
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/mod_base= OTHER
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/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HCMV; human cytomegalovirus; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 CGCAAGAAGAAGAACG 2
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/mod_base= m5c
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'mod_base= m5c
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L5. .20
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es 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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Matches
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AAZ49391/C
ID AAZ49391/C
XX
XX
AX
DE 14-M
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DE HCMV
XX
Vira
KW Vira
KW Crohin
KW Crohin
KW HCMV
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COS Huma
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Sequences AAZ49374-Z49383, AAZ49389 and AAZ49391 represent antisense oligonuclectides designed to have therapeutic activity against certain non-retroviral viruses. The invention relates to new compositions for the non-parenteral delivery of oligonuclectides comprising at least one oligonuclectide in an emulsion. Oligonuclectides delivered via the compositions of the invention can be used to medulate expression of a cellular adhesion protein, modulate a rate of cellular proliferation, or have biological activity against eukaryotic pathogens or retroviruses. They can be used for treating conditions including e.g., ulcerative colifies, Crohn's disease, inflammatory bowel disease or undue cellular proliferation. The compositions can enhance the local and systemic uptake and delivery of mucleic acids via non-parenteral routes of administration of a minimatry of modelivery of modelivery or m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New oligonucleotide compositions used for the non-parenteral delivery of e.g. antisense oligos, ribozymes, peptide nucleic acids, molecular decoys, external guide sequences or aptamers.
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Crohn's disease; inflammatory bowel disease; cellular proliferation;
HCMV; human cytomegalovirus; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HCMV targetted phosphorothioate antisense oligonucleotide ISIS 2922
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Manoharan M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
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note= "2'-methoxyethoxy oligonucleotides"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ecker DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hardee GE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 80; Page 37; 133pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    130 CGGATGAAGAAGATCAAACG 149
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                                                                       /mod_base= m5c
                                                                                                                                                /mod_base= m5c
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                                                                                                                                                                                                                                                                                                         99WO-US011394.
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ID AAZ49383 standard; DNA; 21
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                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC.
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Human herpesvirus 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-072428/06.
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                          modified base
                                                                                                 modified base
                                                                                                                                                                                                                                                                                                       20-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                         21-MAY-1998;
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                                                                                                                                                                                                                                                                                                                New oligonucleotide compositions used for the non-parenteral delivery of e.g. antisense oligos, ribozymes, peptide nucleic acids, molecular decoys, external guide sequences or aptamers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (e.g., via the alimentary canal, skin, eyes, pulmonary tract, urethra or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                   Sequences AAZ49374-Z49383, AAZ49389 and AAZ49391 represent antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Polyribonucleotide solid phase synthesis; diagnosis; hybridisation; protein production modulation; 2' desyrfaranesyl moiecy; anti-HIV; antiteriosclerotic; nuclease resistant; atherosclerosis; AIDS; abnormal cell proliferation; tumour formation; ss.
                                                                                                                                                                                                                                                  Manoharan M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.9%; Score 15.2; DB 1; Length 21; 35.0%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                  Ecker DJ,
                                              /note= "Phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                  Hardee GE,
                                                                                                                                                                                                                                                                                                                                                                                  Claim 80; Page 37; 133pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        130 CGGATGAAGAAGATCAAACG 149
               /*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 CGCAAGAAGAAGACG 2
                                                                                                                                                                                                                                                  Tillman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ48172 standard; DNA; 21 BP
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                                                                                                                                                 99WO-US011394.
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                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                   WPI; 2000-072428/06.
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modified base
                                                                                                                                                 20-MAY-1999;
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comprising 2-fluoro modified ribofurances, inclear comprised comprising 2-fluoro modified ribofurances, inclear are joined together by: (a) internucleotide linkages such that the base portion of the nucleotides forms a mixed base sequence; and (b) at least one of the nucleotides forms a modified ribofurancesyl group bearing a 2'-fluoro substituent; provided that at least two of the nucleotides are 2'-fluoro modified ribofurancesyl nucleotides when the internucleotide linkages are phosphodiester nucleotides. (I) bind to their target mRNA and inhibit its propriate strength and fidelity to its target RNA/DNA. (I) are also useful as research agents, diagnostic agents and as oligonucleotide cueful as research agents, diagnostic agents and as oligonucleotide and includent to prevent reocclusion of the treated arteries. (I) have been sungiciplasty to prevent reocclusion of the treated arteries (I) have been used in conjunction with AZI to treat AIDS patients. (I) have been activate form has been implicated in abnormal cell proliferation and trumour formation. (I) are also used to modulate the expression of protein the expression of protein the contract of the properties of higher quality than
                                                                                                                                                                                                                                                                                    Nuclease resistant oligonucleotides useful as research agents, diagnostic agents, and in the treatment of atherosclerosis and AIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   phosphorous modified oligonucleotide duplexes containing methylphosphonates, phosphoramidates and phosphate triesters. The present sequence represent an oligonucleotide used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes nuclease resistant oligonucleotides (I)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CMV replication chimeric phosphorothioate oligonucleotide SEQ ID NO:18.
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                                                                                                                                                                                                                                                                                                                                                 Example 34; Col 54; 49pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 CGCAAGAAGAAGAGCAAACG
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                                    90US-00566977.
91WO-US005720.
                                                                             92US-00835932
                                                                                              92US-00854634
                 90US-00463358
                                                                                                                 95US-00468037
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                                                                                                                                                            PHARM INC.
                                                                                                                                                                                                     Cook PD;
                                                                                                                                                                                                                                            WPI; 2000-072074/06.
                                                     12-AUG-1991;
05-MAR-1992;
01-JUL-1992;
                                                                                                                                                                                                     Kawasaki AM,
                                                                                                                                                            SISI (-SISI)
                                                                                                                   1995, 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US6005087-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAZ48171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 429
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10017621-381.rng

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AAZ57151 standard; DNA; 21 BP
                                                                                                                                      98US-00167165.
                                                                                                            99WO-US022892.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.9
Best Local Similarity 85.0
Matches 17, Conservative
              /*tag=
                                                                                                                                                                (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                       WPI; 2000-303729/26.
                                                     WO200020431-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Key
modified_base
modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9962922-A1.
                                                                                                            01-OCT-1999;
                                                                                                                                      06-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-DEC-1999.
                                                                                 13-APR-2000
                                                                                                                                                                                             Scozzari A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ57151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ57151/
ਨੋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes nuclease resistant oligonucleotides (I) comprising 2'-fluoro modified ribofurancey1 nucleotides. (I) comprise covalently bound nucleotides, where the nucleotides are joined together by: (a) internucleotide linkages such that the base portion of the nucleotides forms a mixed base sequence; and (b) at least one of the nucleotides includes a modified ribofurancey1 group bearing a 2'-fluoro substituent; provided that at least two of the nucleotides are 2'-fluoro modified ribofurancey1 nucleotides when the internucleotide linkages are phosphodiester nucleotides. (I) bind to their target mRNA and inhibit its appropriate strength and fidelity to its target mRNA/DNA. (I) are also useful as research agents, diagnostic agents and as oligonucleotide cuseful as research agents, diagnostic agents and as oligonucleotide angioplasty to prevent reocclusion of the treated arteries. (I) may be used to treat altherosclerosis following angioplasty to prevent reocclusion of the treated arteries. (I) may also not also be added to the second of the contents of the contents of the contents of the contents. (I) have been contents of the contents of the contents of the contents of the contents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               used to modulate the expression of RAF gene, a cellular gene whose activate form has been implicated in abnormal cell proliferation and tumour formation. (I) are also used to modulate the expression of protein kinase C. (I) exhibit hybridisation properties of higher quality than phosphorous modified oligonuclectide duplexes containing methylphosphonates, phosphoramidates and phosphate triesters. The present sequence represent an oligonucleotide used in the exemplification of the
                                                                                                                                                                                                                                   e resistant oligonucleotides useful as research agents, diagnostic and in the treatment of atherosclerosis and AIDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Solid phase DNA synthesis; phosphoramidate nucleoside; acetonitrile; water content; synthetic oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                              Example 34; Col 54; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 CGCAAGAAGAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                 90US-00566977.
                           98US-00035357
                                                     90US-00463358,
                                                                                            92US-00835932
                                                                                                            92US-00854634
                                                                                                                         95US-00468037.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic oligonucleotide #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA14473 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-AUG-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17; Conservative
                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                Cook PD;
                                                                                                                                                                                                          WPI; 2000-072074/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    present invention
                                                                                                                                                                               Kawasaki AM,
                           05-MAR-1998;
                                                       11-JAN-1990;
                                                                    13-AUG-1990;
                                                                                                                         06-JUN-1995;
                                                                                 12-AUG-1991
                                                                                              05-MAR-1992
                                                                                                            01-JUL-1992
21-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAA14473;
                                                                                                                                                                                                                                    Nuclease
                                                                                                                                                                                                                                                    agents,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 430
AAA14473/c
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8X#X######X#X#X#X##X##X
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The invention relates to the use of acetonitrile having a water content of 30-1250 ppm in the linking of a phosphoramidite nucleoside to a solid support-bound nucleoside, and to the use of this process in the synthesis of oligonucleotides. The method is used for the coupling of a phosphoramidite nucleoside to a solid support-bound nucleoside, particularly in the large-scale synthesis of oligonucleotides using the phosphoramidite method. The oligonucleotides can be used in diagnostic, research and therapeutic applications, e.g., as probes, primers, linkers, adapters and antisense oligonucleotides. The use of acetonitrile having a water content of 30-1250 ppm as compared to conventional methods using lower water content acetonitrile (at most 30 ppm) provides more economical synthesis without reduced efficiency of oligonucleotide synthesis. Sequences AAA14471 represent oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Phosphorothicate, activator, oligonuclectide synthesis, phosphoramidite, phosphitylating reagent; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Coupling of a phosphoramidite nucleoside to a solid support-bound nucleoside, useful for the synthesis of oligonucleotides for use in diagnostic, research or therapeutic applications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
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85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag= a
/note= "phosphorothioate linkages"
/note= "Phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            synthesised using the process of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Phosphorothioate 21-mer oligonucleotide #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
1. .21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 8; Page 20; 30pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 CGCAAGAAGAAGAGCAAACG 2
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The present invention describes nucleoside phosphoramidites and oligonucleotides (ON's) prepared using pyridinium, imidazolium or coligonucleotides (ON's) prepared using pyridinium, imidazolium or coligonucleotides (ON's) prepared using pyridinium, of a phosphitylated compound comprises reacting a compound having a hydroxyl group with a phosphoramidites are useful as building blocks for synthesis of oligonucleotides, which are potentially useful in therapeutic and city producides, which are potentially useful in therapeutic and diagnostic applications. The activators can be produced in situ by mixing pyridine and an acid, producing benefits in large scale synthesis. Compared with conventional activators, e.g. 1H tetrazole, the pyridinium salts, and materials necessary for their generation in situ, are nonexplosive and easier to store, and also cheaper and have higher solubility in organic solvents. Final purity of the phosphitylated contaction mase of a less acidic reaction medium when pyridinium salts are used. The present sequence represents a phosphorothioate 21-mer oligonucleotide, the synthesis of which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide; non-parenteral; multi-particulate; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "Phosphorothioate internucleotide linkage"
                                                                                                                                                                                                  Preparation of nucleoside phosphoramidites and oligonucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example biologically active oligonucleotide #3.
                                                                                                                                 Ravikumar VT;
                                                                                                                                                                                                                                  Example 20; Page 81; 153pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21 CGCAAGAAGAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA94541 standard; DNA; 21 BP
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            99WO-US012251
                                             98US-0087757P
98US-00177953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17; Conservative
                                                                                                                                 Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag=
                                                                                                (ISIS-) ISIS PHARM INC
                                                                                                                                                                   WPI; 2000-097311/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
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modified_base
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               02-JUN-1999;
                                               02-JUN-1998;
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                                                                                                                                 Sanghvi Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA94541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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AAA94541/
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Gaps

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                                                                                                                                                    The present invention relates to non-parenteral multi-particulate formulations for transporting agents (for example therapeutic) across mucosal membranes. The formulations comprise carrier particles bound with a biologically active agent and a penetration enhancer. The formulations associate with buccal, nasal, pulmonary, gastrointestinal and vaginal mucosal membranes to transport the biologically active agents to the lymph system, blood system or epithelial tissue of the subject. The formulation is administered orally which is preferred by patients. The present sequence is an example oligonucleotide that may be used in the
                                                                     Non-parenteral multi-particulate formulations comprise biologically active substances bound to carrier particles for delivery across mucosal membranes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oligonucleotide; non-parenteral; multi-particulate; phosphorothioate; 2'-0-methoxyethyl; 5-methylcytidine; ss.
                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'note = "Phosphorothioate internucleotide linkage"
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0
                                                                                                                                                                                                                                                                                                                           Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mod_base= OTHER
/note= "2'-O-methoxyethyl nucleoside'
                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                      3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example biologically active oligonucleotide #6.
                         Teng C;
                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                         Mehta RC,
                                                                                                                                                                                                                                                                                                                                                                                130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag= g
/mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                       21 CGCAAGAAGAAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          m5c
                                                                                                                               Claim 4; Page 8; 38pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        m5c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                           Query Match 0.9%;
Best Local Similarity 85.0%;
Matches 17; Conservative
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/mod_base= 1
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15. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA94544 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mod_base=
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                         Tillman LG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    *tag=
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(ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              *tag=
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                                                WPI; 2000-572032/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified base
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                         Hardee GE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 433
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Schwerdel M;

Gothe G,

Unger E,

Greiner B,

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(AVET ) AVENTIS PHARMA DEUT GMBH.
                                            WPI; 2001-203679/21
                           Uhlmann E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·;
                                                                                                                                                                                                                                                           The present invention relates to non-parenteral multi-particulate formulations for transporting agents (for example therapeutic) across mucosal membranes. The formulations comprise carrier particles bound with a biologically active agent and a penetration enhancer. The formulations associate with buccal, nasal, pulmonary, gastrointestinal and vaginal mucosal membranes to transport the biologically active agents to the lymph system, blood system or epithelial tissue of the subject. The formulation is administered orally which is preferred by patients. The present sequence is an example oligonucleotide that may be used in the
                                                                                                                                                                                                      Non-parenteral multi-particulate formulations comprise biologically active substances bound to carrier particles for delivery across mucosal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Transport; membrane; cytostatic; virucide; vasotropic; dermatological;
                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antipsoriatic; antiasthmatic; gene therapy; tumor cell; antisense;
                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                 Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
'note= "2'-0-methoxyethyl nucleoside"
                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                   Teng C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Anti-CMV oligonucleotide SEQ ID 12.
                                                                                                                                                                  Mehta RC,
                                                                                                                                                                                                                                                                                                                                                                                                                         CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                           CGCAAGAAGAGGCAAACG 2
                                                                                                                                                                                                                                           Claim 4; Page 8; 38pp; English.
                          /mod_base= m5c
                                                       /mod_base= m2c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                             23-FEB-2000; 2000WO-US004662.
                                                                                                                                                                                                                                                                                                                                                                                   0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99DE-01035302
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                                                                                                                               99US-00256515
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-MAY-2001 (first entry)
                                            /*tag= i
                 /*tag= h
                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF60903 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tumor therapy; drug; ss.
                                                                                                                                                                 Tillman LG,
                                                                                                                                                 (ISIS-) ISIS PHARM INC
                                                                                                                                                                                     WPI; 2000-572032/53
                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
Les 17; Conserv
                                                                         WO200050050-A1
        modified base
                                    modified base
                                                                                                                               23-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-JUL-1999;
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                                                                                           31-AUG-2000
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                                                                                                                                                                                                                                                                                                                                                 formulation
                                                                                                                                                                   Hardee GE,
                                                                                                                                                                                                                           membranes
                                                                                                                                                                                                                                                                                                                                                                                                                         130
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                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 434
                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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This invention describes a novel conjugate (1) which consists of (A) a molecule to be transported and (B) at least one arryl residue of formula - Ar (X-(X)-R_1) n (II). Ar = group containing at least one aromatic ring; X = O or N (sic); Y = O, S NH-R_2 (sic); R_1 = optionally substituted copionally substituted and (II) and the containing double and/or triple bonds); n = integer of 1 or more. (A) is bonded to (B) directly or triple bonds); n = integer of 1 or more. (A) is bonded to (B) directly or via a chemical group, provided that the chemical group is other than CH_2 containing a temporal containing a conjugate (I') of (A') a molecule to be transported and (B') at least one aryl residue (not restricted to containing a reactive function at the position at which (B') is to be bonded, preparing (B') and reacting (A') and (B'); and (ii) the use of aryl groups (II) (optionally bonded via a chemical containing a cross biological membranes. The products of the invention have cytostatic, virucide, vasotropic, dernatological, aritypsoriatic and antiasthmatic activity and can be used for generator containing (I) are also claimed. The containing (I) are also claimed. The containing (I) are also claimed. The containing (I) are also claimed. Typically (I) are antisense or into entaining (I) are antisense or into entaining (I) are antisense collision or collision or collision or collisions associated with integring or collisions or 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; variant thrombospondin 1; variant thrombospondin 4; SNP; polymorphism; vascular disease; coronary artery disease; forensics; myocardial infarction; atherosclerosis; stroke; venous thromboembolism; pulmonary embolism; paternity test; ds.
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New substituted aryl conjugates of parent molecules, especially oligonuclectides, having improved transmembrane and intracellular transport properties, useful as medicaments or diagnostic agents.
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85.0%; Pred. No. 6e+02;
ive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                        Disclosure; Page 6; 28pp; German.
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replace (11, T)
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26-JUL-2000; 2000US-0220947P.
16-AUG-2000; 2000US-0225724P.
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ID AAH46453 standard; DNA; 21
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Best Local Similarity 85.0%
Conservative
The Transfer of the Conservative Cons
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                                                                                    WO200118250-A2
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    Variation
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                                                                                                                                                                                                                                                                                                                                                                  Lander
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocardial infarction, coronary heart disease, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also correlations to diseases. The present sequence is an example of one of the human gene SNPS shown in the specification
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mccarthy JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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/standard_name= "single nucleotide polymorphism"
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                                                            Location/Qualifiers
replace(11,G)
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                      Homo sapiens
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                                                              Key
Variation
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SOXX BETTTEN XX BE THE THE TAX BE XX BE XX
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disease, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also useful in forensics, paternity testing, genetic analysis and phenotype correlations to diseases. The present sequence is an example of one of the human gene SNPS shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various bolymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a unber of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosolerosis, myocardial infarction, coronary heart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mccarthy JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Daley GQ,
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/mod_base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bolk S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (WHED ) WHITEHEAD INST BIOMEDICAL RES. (MILL-) MILLENNIUM PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gargill M, Ireland JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example; Page 57; 242pp; English.
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Disclosure; Page 18; 93pp; German.
WPI; 2001-049743/06.
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                                                                                                                                                                     Local Similarity
Les 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                              Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        modified base
                                                                                                                                                                                                                                                                                                                                CMV targeted
                                                                                                                                                                                                                                                                                                                                                                                         Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-APR-2000;
                                                                                                                                                                                                                                                                                                              15-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-OCT-2001
                                                                                                                                                                                                                                                                                          ABL01595;
                                                                                                                                                            Query Match
                                                                                                                                                                       Best Loca
Matches
                                                                                                                                                                                                                                                  RESULT 439
                                                                                                                                                                                                                                                              ABL01595/
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                                                                                                                                                                           The present invention relates to a method for preparing phosphorothioate oligonucleotides having at least one nucleoside with a 2' modification. The method comprises phosphitylating the 5'-hydroxyl of a nucleic acid group having at least one nucleoside with a 2' modification in an acceonitrile. The present sequence was used to illustrate the method of the present invention. The method is useful for synthesising sulphurised 2' substituted phosphorothioate oligonucleotides, which may be used in molecular biological research, in applications such as anti-viral therapy, and for determining the stereochemical pathways of certain enzymes which recognise nucleic acids
                                                                                                                     Preparing sulfurized 2' substituted phosphorothioate oligonucleotides useful in biological research, comprises phosphitylating the 5'-hydroxyl of a nucleic acid having a nucleoside with a 2' modification.
                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                 .;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Phosphorothioate oligomer; diagnosis; therapy; disease; AIDS;
                                                                                                                                                                                                                                                                                                             0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                          Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified phosphorothioate 21-mer SEQ ID NO: 3.
                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                              Cheruvallath ZS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cole DT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                    130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                      CGCAAGAAGAAGAACG 2
                                                                                                                                                             Example 5; Col 6; 7pp; English
                    11-JAN-2000; 2000US-00481486.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-MAY-2000; 2000WO-US012447.
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                                        97US-00950779
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                                                                                                                                                                                                                                                                                                                                                                                                               1207/c
AAC88207 standard; DNA; 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                              Ravikumar VT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                            (ISIS-) ISIS PHARM INC
                                                                                                  WPI; 2001-407218/43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                atherosclerosis; ss
                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200068241-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
modified base
                                        15-OCT-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-NOV-2000
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  05-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                          AAC88207;
                                                                              Cole DL,
                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 438
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                                                                                                                                                                    The present invention provides novel compositions comprising phosphoramidite compounds which can be used to synthesise modified oligonucleotides. These modified oligonucleotides have phosphorothioate backbones. They can be used to produce probes, primers, linkers, adaptors and gene fragments and in disease diagnosis and therapy, for example in the treatment of AIDS and atherosclerosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New peptide nucleic acid derivatives, useful e.g. for tumor treatment and diagnosis, contain terminal, deprotonizable phosphoryl groups for e.g. improved solubility.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /*tag= a
/note= "This sequence is a peptide nucleic acid, i.e. it
contains a polyamide backbone instead of a deoxyribose
backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "linked to one of the peptides shown in ABB04517 and ABB04518 to form a PNA-peptide conjugate"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Peptide nucleic acid; PNA; cytostatic; virucide; dermatological; antiasthmatic; overexpression; viral infection; vitiligo; antisense; pigmentation disorder; asthma; polyamide backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
Preparation of oligonucleotides useful in diagnostics using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.9%; Score 15.2; DB 1; Length 21; llarity 85.0%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antisense peptide nucleic acid SEQ ID NO: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                      Example 7; Page 44; 75pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /*tag= b
/mod_base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (AVET ) AVENTIS PHARMA DEUT GMBH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21 CGCAAGAAGAAGAGCAAACG 2
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                                    phosphoramidite compositions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABL01595 standard; DNA; 21
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ABK99295 standard; RNA; 21 BP.

RESULT 441

ABK99295/

ABK99295

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to peptide nucleic acid (PNA) derivatives. These can be used in the treatment of cancer, viral infections, vitiligo or other pigmentation disorders, and asthma. The present sequence is an oligonucleotide fragment of a PNA described in the exemplification of the
The present invention relates to peptide nucleic acid (PNA) derivatives beaving at the C., and optionally N., terminus one or more phosphoryl groups, at least one of which contains one or more deprotonisable groups, preferably hydroxy or mercapto. These PNAs are useful in the treatment of tumours or any disease associated with (over) expression of particular genes, including viral infections, vitiligo or other pigmentation disorders, and asthma. The present sequence is a peptide nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New peptide nucleic acid derivatives, useful e.g. for treating tumors and diagnosis, have N-terminal phosphoryl residue for improving e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Peptide nucleic acid; PNA; polyamide backbone; phosphoryl radical; cytostatic; virucide; dermatological; antiasthmatic; cancer; antisense; viral infection; vitiligo; pigmentation disorder; asthma; ss.
                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                    DB 1; Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CMV targeted antisense peptide nucleic acid SEQ ID NO: 1.
                                                                                                                                                                                                                                        3; Indels
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                                                                                                                                                                Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                             described in the exemplification of the invention
                                                                                                                                                                                                    Query Match
0.9%; Score 15.2; DB 1
Best Local Similarity 85.0%; Pred. No. 6e+02;
                                                                                                                                                                                                                                      0; Mismatches
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                                                                                                                                                                                                                                                                         130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Will DW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (AVET ) AVENTIS PHARMA DEUT GMBH
                                                                                                                                                                                                                                                                                                           21 CGCAAGAAGAAGAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-APR-2000; 2000DE-01019136.
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                                                                                                                                                                                                                                        17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Breipohl G,
                                                                                                                                                                                                                                                                                                                                                                                                   ABA97455 standard; DNA;
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Matches 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
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The invention relates to a replicase complex comprising a hepatitis C virus (HCV) NS5B replicase protein, a linear nucleic acid template and a complementary nucleic acid primer which is annealed to the 3' terminus of the template, where the template is at least three nucleotides and the primer is two or three nucleotides, and the template and primer do not form a stable duplex in solution in the absence of the HCV NS5B protein. The complex is useful for detecting HCV replicase activity and permits catablishment of sensitive RNA-dependent RNA polymerase assays to screen and evaluate antiviral inhibitors and to improve the specificity and efficacy of the inhibitors. The complex is also useful in the development of a reliable system for determining kinetic and thermodynamic constants of HCV NS5B-catalysed nucleotide incorporation and investigation of mechanistic inhibitors for mis-incorporation or chain termination.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3 nucleotide-long template to which a 2 nucleotide-long primer is annealed, and template and primer which do not form a stable duplex in the absence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 screening assays which are used for determining kinetic, thermodynamic and mechanistic properties of NS5B replication and ultimately in the development of inhibitors of NS5B. Newly identified inhibitors of replicase activity may be used for developing anti-HCV pharmaceuticals. Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                       Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #25.
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                                                                                                                         Hepatitis C virus; HCV; NS5B replicase; ss; RNA polymerase.
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                                                                                                                                                                                                                                                                        06-APR-2001; 2001US-00828034.
                                                                                                                                                                                                                                                                                                             07-APR-2000; 2000US-0195852P.
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ABK99280 standard; RNA; 21
                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                     FERRARI E.
                                                                                                                                                                                                                                                                                                                                                 (ZHON/) ZHONG W.
                                                                                                                                                                                                JS2002064771-A1.
                                                                                                                                                                                                                                                                                                                                                                      HONG Z.
                                                     21-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17;
                                                                                                                                                                                                                                      30-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of HCV NS5B
                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                     FERR/)
                                                                                                                                                                                                                                                                                                                                                                      HONG/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 442
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130 CGGATGAAGAAGATCAAACG 149

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21 CGCAAGAAGAAGAGCAAACG 2

virus; HCV; NS5B replicase; ss; RNA polymerase

(first entry)

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The invention relates to a replicase complex comprising a hepatitis C virus (HCV) MSSB replicase protein, a linear nucleic acid template and a complementary nucleic acid primer which is annealed to the 3 terminus of the template, where the template is at least three nucleotides and the primer is two or three nucleotides, and the template and primer do not form a stable duplex in solution in the absence of the HCV MSSB protein. The complex is useful for detecting HCV replicase activity and permits establishment of sensitive RNA-dependent RNA polymerase assays to screen and evaluate antiviral inhibitors and to improve the specificity and efficacy of the inhibitors. The complex is also useful in the development of a reliable system for determining kinetic and thermodynamic constants
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel replicase complex comprising hepatitis C virus NS5B replicase, a 3 nucleotide-long template to which a 2 nucleotide-long primer is annealed, and template and primer which do not form a stable duplex in the absence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of a reliable system for determining kinetic and thermodynamic constant of HCV NSSB-catalysed nucleotide incorporation and investigation of mechanistic inhibitors for mis-incorporation or chain termination. Specifically, the short RNA template and primer pairs are useful in screening assays which are used for determining kinetic, thermodynamic and mechanistic properties of NSSB replication and ultimately in the development of inhibitors of NSSB. Newly identified inhibitors of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 replicase activity may be used for developing anti-HCV pharmaceuticals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequences ABK99271-ABK99296 represent HCV NS5B replicase RNA synthesis
                                                                                      Hepatitis C virus (HCV) NS5B replicase RNA synthesis template #10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 7 A; 14 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTGGTGGTGGTGCCGCAGT 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example; Page 6; 17pp; English.
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                                                                                                                                                                                                                                                                           06-APR-2001; 2001US-00828034.
                                                                                                                                                                                                                                                                                                               07-APR-2000; 2000US-0195852P.
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ABV73946 standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                 HONG Z.
FERRARI E.
                                                                                                                                                                                                                                                                                                                                                                                                                         Zhong W, Hong Z,
                                                                                                                                                                                                                                                                                                                                                  ZHON/) ZHONG W.
                                                                                                                                                                                                    US2002064771-A1.
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                                                     21-OCT-2002
                                                                                                                           Hepatitis C
                                                                                                                                                                                                                                      30-MAY-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of HCV NS5B
                                                                                                                                                                 Synthetic
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                 ABK99280
                                                                                                                                                                                                                                                                                                                                                                 (HONG/)
(FERR/)
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Ferrari E

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The present sequence is that of antisense oligonuclectide (ODN) 5114

(Formiversen 13312 ISIS), which was used in an example of the invention in which methylated CpG-like oligonuclectides were compared with unmethylated ODNs for their immunostimulant activity. ODN 5114 exhibited significant stimulatory capability on human B cells, and its corresponding methylated form, ODN 5154 (see ABV73595) also induced stimulation, although to a lesser extent. Methylated CpG, CpI and ZpY ODNs of the invention (see ABV73935-37) are useful for inducing an immune response in a subject, including humans, for the treatment or prevention of an infectious disease, cancer, allergy or asthma, for enhancing or stimulating bone marrow proliferation in an immunodeficiency, particularly in a subject undergoing chemotherapy, for enhancing crythropoiesis in anaemia, for enhancing thrombopoiesis in thrombocytopaenia, for enhancing neutrophil proliferation in neutropaenia, and for inducing cytokine (e.g. interleukin (IL)-1 beta, IL neutropaenia, and for inducing cytokine (e.g. interleukin (IL)-1 beta, IL companial proliferation and for interferon-alpha or interferon-gamma)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        useful for treating or preventing infectious diseases, cancer, allergy, asthma, immunodeficiency, anemia, thrombocytopenia or neutropenia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New compositions comprising CpG-like immunostimulatory nucleic acids, useful for treating or preventing infermal....
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0
                                                   Immunostimulant; infection; allergy; asthma; cancer; anaemia;
thrombocytopaenia; neutropaenia; antimicrobial; antiasthmatic;
cytostatic; antianaemic; antiallergic; haemostatic; antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                              /note= "phosphorothioate linkage"
                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 89; 148pp; English.
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                                                                                                                                                                                                       1. .21
/*tag= a
/mod_base= OTHER
                 Antisense oligonucleotide 5114
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                                                                                                            phosphorothioate; ss.
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Best Local Similarity
Matches 17; Conserv
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                                                                                                                                                                                       Key
modified_base
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ABV73950/c
ID ABV7:
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AC ABV7:
DT 13-J7
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Gaps

0;

DB 1; Length 21;

0.9%; Score 15.2; DB 1; Length 2 15.0%; Pred. No. 6e+02; lve 0; Mismatches 3; Indels

85.0%;

Conservative

BP.

21

(first entry)

13-JAN-2003

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Gaps ..

Indels

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0; Mismatches

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6e+02;

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Pred.

82.08;

Local Similarity 85.0 hes 17; Conservative

Best Loc Matches

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WO200269369-A2
                                            modified base
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                                      modified base
                          modified base
                                                                           38-DEC-2000;
                                                                                  Schetter C,
                                                                   06-SEP-2002
             Synthetic.
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New compositions comprising CpG-like immunostimulatory nucleic acids, useful for treating or preventing infectious diseases, cancer, allergy, asthma, immunodeficiency, anemia, thrombocytopenia or neutropenia.
                                           Immunostimulant; infection; allergy; asthma; cancer; anaemia;
thrombocytopaenia; neutropaenia; antimicrobial; antiasthmatic;
cytostatic; antianaemic; antiallergic; haemostatic; antisense;
                                                                                                                                                                                                                                                                                                     note= "phosphorothioate linkage"
Methylated antisense oligonucleotide 5154.
                                                                                                                                                                                                              Location/Qualifiers
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                                                                                                                                                                                                                                                                               base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= g
/mod_base= m5c
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/mod_base= m5c
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                                                                                                                                                                                                                                                                               mod,
                                                                                                                  phosphorothioate; ss
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interleukin (IL)-1 beta, IL for The present sequence is that of methylated oligonuclectide (ODN) 5154, a methylated version of antisense ODN 5114 (see ABV73946), which was used in an example of the invention in which methylated Cp6-like ODNs were compared with unmethylated ODNs for their immunostimulant activity. ODN 5114 exhibited significant stimulatory capability on human B cells. ODN 5154 also induced stimulation, although to a lesser extent. Methylated CpG, CpI and ZpY ODNs of the invention (see ABV73935-37) are useful for inducing an immune response in a subject, including humans, for the treatment or prevention of an infectious disease, cancer, allergy or a sthma, for enhancing or stimulating bone marrow proliferation in an immunodeficiency, particularly in a subject undergoing chemocherapy, enhancing erythropoiesis in anaemia, for enhancing thrombopoiesis in thrombocycopaenia, for enhancing neutrophil proliferation in neutropaenia, and for inducing cytokine (e.g. interleukin (IL)-1 beta production (all claimed) Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

DB 1; Length 21;

0.9%; Score 15.2;

Query Match

encoding a human protein kinase C (PKC) isoform (i.e. PKC-alpha, PKC-beta type I, PKC-beta type II, PKC-gamma, PKC-delta, PKC-epsilon, PKC-zeta, and PKC-eta). The antisense oligonucleotides of the invention are useful for modulating the expression of the PKC isoforms. The antisense oligonucleotides are useful for treating hyperproliferative conditions (e.g. tumour, glioblastoma, bladder cancer, breast cancer, colon cancer and lung cancer), and inflammatory conditions (e.g. psoriasis). The antisense oligonucleotides of the invention are also useful for detection and diagnosis of PKC expression. The present sequence represents an antisense oligonucleotide described in the invention. NOTE: The present New antisense oligonucleotide having nucleoside units which specifically The invention comprises antisense oligonucleotides designed to bind mRNA binds mRNA encoding human protein kinase C isoform, useful for treating hyperproliferative and inflammatory diseases e.g. psoriasis, tumor and PKC antisense oligonucleotide; protein kinase C; PKC-alpha; PKC-beta type I; PKC-beta type II; PKC-gamma; PKC-delta; PKC-epsilon; PKC-seta; PKC-eta; PKC expression modulation; ss; hyperproliferative condition; tumour; glioblastoma; bladder cancer; breast cancer; colon cancer; lung cancer; inflammatory condition; psoriasis; phosphorothioate backbone; hepatitis C virus; HCV; ICAM-1; G; 10 T; 0 U; 0 Other; Cytomegalovirus (CMV) treatment oligonucleotide. contains a phosphorothioate backbone ö Hoke Example 19; Col 25; 77pp; English. Cook PD, BP 90US-00463358. 90US-00566977. 91WO-US000243. 920S-00852852. 930S-00058023. 930S-00089996. 940S-00297703. 950S-00481066. 97US-00829637. 91US-00777760 91US-00777007 Sequence 21 BP; 0 A; 6 C; 5 27 (first entry) ABL90981 standard; DNA; (ISIS-) ISIS PHARM INC Dean NM, cytomegalovirus; CMV. WPI; 2002-215022/27 15-OCT-1991; 16-OCT-1991; 16-MAR-1992; Unidentified US6339066-B1 31-MAR-1997; 09-JUL-1993; 29-AUG-1994; 11-JAN-1991; 05-MAY-1993; 27-MAY-2002 15-JAN-2002 07-JUN-1995 Bennett CF, ABL90981; RESULT 445 ABL90981/c 

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Novel G protein-coupled receptor, PCR primer #10.
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Cheruvallath ZS, Ravikumar VT,
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Les 17; Conserv
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                                                                  WO200231145-A1
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                                                                                    18-APR-2002
                                                 Synthetic
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                                                                                                                                                                        Sato S,
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a novel colocarcinoma-originated G protein-coupled receptor protein. The protein and encoded DNAs are for diagnosis and developing drugs e.g. with transgenic animals to treat diseases of the central nervous system, endocrine and metabolic diseases, and cancer, including by gene therapy. ARK69599-ABK69646 represent G protein-coupled receptor protein coding sequences and related primers of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                     Gaps
                                                                                                                                                                                G protein coupled receptor; nootropic; neuroprotective; cytostatic; transgenic; central nervous system disorder; endocrine disorder; metabolic disease; cancer; gene therapy; colocarcinoma; primer; ss.
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Pred. No. 6e+02;
 Length 21;
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                    3; Indels
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Score 15.2; DB 1;
Pred. No. 6e+02;
0; Mismatches 3;
                                                                                                                                                               Novel G protein-coupled receptor, PCR primer #3.
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                                       130 CGGATGAAGAAGATCAAACG 149
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16-NOV-2000; 2000JP-00350057
  0.98;
         85.0%;
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Best Local Similarity 85...
Fra 17; Conservative
                    17; Conservative
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                                                                                                         standard; DNA;
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          Best Local Similarity
Matches 17; Conser
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New human colocarcinoma-originated G protein-coupled receptor protein for developing drugs e.g. with transgenic animals to treat diseases of the central nervous system, endocrine diseases and cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oligomeric synthesis method; diagnostic; therapeutic; antisense agent; antiviral agent; competitive inhibitor; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
protein coupled receptor; nootropic; neuroprotective; cytostatic;
                            transgenic, central nervous system disorder; endocrine disorder; metabolic disease; cancer; gene therapy; colocarcinoma; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligomeric compound synthesis method associated polynucleotide #3.
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М
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Yoshimura K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 6; Page 182; 210pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Miyajima N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  396 TGAGGTGCAGTCTCCAGTGA 415
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99US-00349659.
                                                                                                                                                                                                                                                                                                                                                                                                            13-OCT-2000; 2000JP-00313533.
16-NOV-2000; 2000JP-00350057.
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                                                                                                                                                                                                                                                                                                                                           12-OCT-2001; 2001WO-JP008977.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (TAKE ) TAKEDA CHEM IND LTD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shintani Y,
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oligomeric compounds are useful e.g. as oligonucleotides or oligonucleotide analogues in diagnostics, therapeutics and as research agents. Oligonucleotides and their analogues have been used in molecular biology as probes, primers, linkers, adapters and gene fragments. They may also be useful as antisense agents for various disease states, e.g. antiviral agents, or as competitive inhibitors of transcription factors to modulate their action. Oligonucleotides and their analogues have also been used as direct and indirect regulators of protein, in diagnostic hybridistation techniques, and as primers in PCR reactions. This sequence represents a synthetic polynucleotide created using the oligomeric compounds synthesis method described in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New oligomeric compounds containing e.g. phosphite, phosphodiester and phosphorothicate linkages, useful as oligonucleotides or analogs in diagnostics, therapeutics and as research agents.
                                                 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligomeric synthesis method; diagnostic; therapeutic; antisense agent; antiviral agent; competitive inhibitor; ss.
                                                                                                                                                 The invention describes oligomeric compounds containing a moiety. The
                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                               New oligomeric compounds containing e.g. phosphite, phosphodiester a
phosphorothioate linkages, useful as oligonucleotides or analogs in
diagnostics, therapeutics and as research agents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligomeric compound synthesis method associated polynucleotide #7.
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85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cole DL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 15; Page 20; 33pp; English
                                                                                                                  Example 11; Page 20; 33pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ravikumar VT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGCAAGAAGAGAGCAAACG 2
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              WPI; 2002-589134/63
                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cheruvallath ZS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JS2002055623-A1
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                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             449
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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oligomeric compounds are useful e.g. as oligonucleotides or oligonucleotide analogues in diagnostics, therapeutics and as research agents. Oligonucleotides and their analogues have been used in molecular

The invention describes oligomeric compounds containing a moiety. The

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biology as probes, primers, linkers, adapters and gene fragments. They may also be useful as antisense agents for various disease states, e.g. antiviral agents, or as competitive inhibitors of transcription factors to modulate their action. Oligonucleotides and their analogues have also been used as direct and indirect regulators of protein, in diagnostic hybridisation techniques, and as primers in PCR reactions. This sequence represents a synthetic polymucleotide created using the oligomeric compounds synthesis method described in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel isolated or substantially purified Von Willebrand factor-cleaving protease, useful for producing preparation for therapy of thrombosis and thromboembolic disease such as thrombotic thrombocytic purpura.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, Von Willebrand factor-cleaving protease, vWF-cp, therapy; enzyme; transgenic animal; immunisation; thromboembolic disease; preeclampsia; thrombotic thrombocytic purpura; TTP, Henoch-Schonlein purpura; thrombosis; neonatal thrombosyopaenia; haemolytic-uraemic syndrome; transgenic; anticoagulant; RT-PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human Von Willebrand factor-cleaving protease cloning PCR primer, 6278.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Henoch-Schonlein purpura, preeclampsia, neonatal thrombocytopaenia or haemolytic-uraemic syndrome. vWF-cp can also be used for processing
                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               thromboembolic disease such as thrombotic thrombocytic purpura (TTP),
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Ή.
                                                                                                                                                                                                                              0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
ative 0; Mismatches 3; Indels
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Tagliavacca
                                                                                                                                                                                              Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gerritsen HE, Furlan M, Turecek
r F, Antoine G, Kerschbaumer R,
K, Voelkel D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 3; Page 34; 93pp; English.
                                                                                                                                                                                                                                                                                                                       130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                             21 CGCAAGAAGAAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
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12-APR-2001; 2001US-00833328.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAD39344 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BAXT ) BAXTER AG.
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Zimmermann K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-OCT-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAD39344;
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Sequence 21 BP; 5 A; 4 C; 9 G; 3 T; 0.U; 0 Other;

g

Gaps

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The invention relates to a method for amplifying a nucleic acid using Single Primer Amplification (SPA). The method comprises synthesising a template nucleic acid containing a predetermined sequence and hairpin structure with the nested oligonucleotide extension reaction. The method is useful for amplifying a nucleic acid, preferably for amplifying a family of related micleic acid sequences to build a complex library of polypeptides encoded by the sequences. The engineered nucleic acid strand by broviding a nucleic soid with a predetermined sequence engineered nucleic acid strand sequence complementary to the predetermined sequence and a hairpin structure between them and contacting the engineered nucleic acid strand with a primer containing at least a portion of the predetermined sequence. This process is done in the presence of a polymerse and complementary nucleic acid strand. The method of the invention is useful complementary nucleic acid strand. The method of the invention is useful sequence located on the same or different nucleic acid molecules. This polymerse processents an oligonucleotide relating to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Amplifying nucleic acid by synthesizing template nucleic acid containing
plasmatic or recombinantly produced vWF. The invention is useful for construction expression systems and generating transgenic animals which express the polypeptide in vivo. The present sequence is human vWF-cp gene cloning RT-PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Single Primer Amplification, nested oligonucleotide extension reaction, hairpin, SPA, library, ds.
                                                                                                                                                                                                                                                              Score 15.2; DB 1; Length 21; Pred. No. 6e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human light chain lambda gene related oligo SEQ ID No 165.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a predetermined sequence and hairpin structure and using target amplification by Single Primer Amplification.
                                                                                                                                                                                           Sequence 21 BP; 2 A; 8 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bowdish KS, Barbas-Frederickson S,
                                                                                                                                                                                                                                                                                                                                                                                                            509 GCTACCTGGAGAGCTGACC 528
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19-SEP-2001; 2001US-0323400P
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                                                                                                                                                                                                                                                              Query Match 0.9%;
Best Local Similarity 85.0%;
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABT06151 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-500537/53
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ABTO6151
1D DX XX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Method for preparation of oligomeric compounds, useful for modulating RNA or DNA which code for a protein, in diagnostics and therapeutics and as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention discloses a method for preparation of oligomeric compounds having phosphite, phosphodiester, phosphorothicate, phosphorothicate or other linkages. The method is useful for preparing oligomeric compounds which are used to modulate RNA or DNA which code for a protein. They can be used in diagnostics, therapeutics (e.g. gene therapy) and as research reagents. The sequence presented is the phosphorothicate oligonucleotide
                                                                                                                                                                                                                                                                         ss; oligomeric compound; phosphite; phosphodiester; phosphorothioate; phosphorodithioate; diagnostic; therapeutic; gene therapy.
                                Gaps
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0.9%; Score 15.2; DB 1; Length 21; 55.0%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
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/mod_base= OTHER
/note= "OTHER= phosphorothioate backbone"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 15.2; DB 1; Length Pred. No. 6e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                              Synthetic phosphorothioate oligonucleotide #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cole DL;
                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                            634 CTGGGCGAGGGTACCTATGC 653
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                                                                                                                                                           BP.
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                 85.08;
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                                Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-730487/79
             Local Similarity
Les 17; Conserv
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Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               research reagents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cheruvallath 2S,
                                                                                                                                                                                                                                                                                                                                                Key
modified_base
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                                                                                                                                                                                                                  15-APR-2003
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                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                       ABX10631;
    Query Match
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Matches
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the template for

Maruyama T;

Lin Y, Mcwhirter J,

ACC49160/c

RESULT

21 CGCAAGAAGAAGAGCAAACG

ABX10710 standard; DNA; 21 BP

RESULT 454

ABX10710

(first entry)

ABX10710;

Page 237

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HCMV inhibitory antisense oligonucleotide SEQ ID NO:3.
                                 cellular proliferation; ss
ACC49160 standard; DNA;
                                                                                    (ISIS-) ISIS PHARM INC
                                                                                                WPI; 2003-342432/32
                                                              WO2003018134-A2
                                            Key
modified_base
           19-JUN-2003
                                       Synthetic.
     ACC49160;
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The invention relates to an isolated glycoprotein hormone Zlut1 sequence, the mature protein or antigenic peptides derived from Zlut1. Also included are an isolated polynuclectide encoding Zlut1, an isolated antibody that specifically binds to Zlut1, treating hyperthyroidism in female mammals by administering Zlut1 and a pharmaceutical composition comprising Zlut1. Zlut1 is useful for manufacturing a medicament for treating hyperthyroidism. Anti-Zlut1 antibodies can be used to detect Zlut1 in tissue sections from a biopsy specimen or to screen biological samples in vitro for the presence of Zlut1. Zlut1 is useful for treating women with hyperthyroidism. The nucleic acid molecules are useful for detecting the expression of a Zlut1 gene in a biological sample. The use as a probe for detecting Zlut1 gene in a biological sample. The use as a probe for detecting Zlut1 genemic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New Zlutl polypeptides and polynucleotides, useful for manufacturing medicament for treating hyperthyroidism.
                                                                                                                                                                                            Human; ss; PCR; Zlutl; glycoprotein hormone; hyperthyroidism; antithyroid; chromosome 14q23.3; primer.
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                                                                                                                                        Human glycoprotein hormone Zlut1 PCR primer #6.
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20-APR-2001; 2001US-00839706.
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Best Local Similarity 85.vv,
Conservative
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                                                                                   (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (HOLL/) HOLLOWAY J L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (WEBS/) WEBSTER P J. (THAY/) THAYER E C.
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                                                                                                                                                                                                                                                                                  Homo sapiens
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                                                                                 15-APR-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes an oral pharmaceutical formulation (I) for delivering a bioreactive macromolecule to a mucosal surface. (I) comprises a first population of carrier particles comprising drug and a bioadhesive compound; and a second population of carrier particles comprising a penetration enhancer. Also described is a method for enhancing the mucosal absorption of the bioactive macromolecule in a mammal (preferably a human) by mucosally administering (I). (I) has antiuleer, antiinflammatory, antirhequantic, antiarthritic and cytostatic activities. (I) can be used for delivering a bioreactive macromolecule to a mucosal surface. It is used for the oral delivery of a drug to an animal encompassing a human as well as other mammals, reptiles, fish, amphibians and birds. It is used to deliver drugs including peptides, proteins, mucleic acids (DNA and and an an incomplement and an animal encompassing a human as well as other mammals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        suffer from any disease treatable with the inventive composition, e.g. ulcerative collitis, rheumatoid arthritis, Crohn's disease, inflammatory bowel disease, or undue cellular proliferation (cancers and tumours). The present sequence represents an exemplary oligonucleotide from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oral pharmaceutical formulation for delivering bioreactive macromolecule to mucosal surface, contains drug, bioadhesive compound, and penetration
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                                                                                 enhanced mucosal drug absorption; antiulcer; antinflammatory; cancer; antirheumatic; antiarthritic; cytostatic; ulcerative colitis; tumour; rheumatoid arthritis; Crohn's disease; inflammatory bowel disease;
                                                      Inhibition; antisense oligonucleotide; phosphorothioate; bioadhesive;
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                                                                                                                                                                                                                                                                                Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                              /mod_base= OTHER
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0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                 163 ACACTCCGAGGTGGCCGAGG 182
                                                                        2 ACACTCCGTGGTGGCAGTGG 21
                                                                                                                                                                                    (first entry)
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xaxex
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130 CGGATGAAGAAGATCAAACG 149

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The invention relates to a novel compound comprising an optionally stabilised nucleic acid or its analogue encoding a peptide, protein or other blological modifier, aptamer, antisense sequence, or antisense confer blological modifier, aptamer, antisense sequence, or antisense confine conjugated directly or through a linker to a ligand for the transcobalamin receptor or intrinsic factor receptor. A compound of the invention has cytostatic, antiviral, anti-HIV, hepatotropic, antinflammatory, virucide, tuberculostatic, and protozoacide activity. The compounds may be useful in the manufacture of a medicament for the and modulates a blological process, in medical therapy A compound is also useful for treating cancer, viral diseases such as infection caused by HIV, hepatitis (hepatitis B, hepatitis C and hepatitis D), herpes, TB, bytius, adenoviruses, recoviruses, respiratory syncytial virus, mumps virus, adenoviruses, revoviruses, respiratory syncytial virus, enteroviruses, gastroenteritis viruses, rubella viruses, rubella virus, enteroviruses, respiratory subella virus, rubella virus, rub
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                                                  Human; antisense; transcobalamin receptor; intrinsic factor receptor;
cytostatic; antiviral; anti-HIV; hepatotropic; antiinflammatory;
virucide; tuberculostatic; protozoacide; cancer; viral disease; ss; IE-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleic acid, aptamer, antisense sequence, or antisense mimic conjugated to a ligand for the transcobalamin receptor or intrinsic factor receptor.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Compound useful for treating e.g. cancer comprises optionally stabilized nucleic acid, aptamer, antisense sequence, or antisense mimic conjugated
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Collins DA, Callstrom M, Prendergast FG;
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Human IE-2 antisense oligonucleotide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   130 CGGATGAAGAAGATCAAACG 149
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2002US-0410627P.
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                                                                                                                                                                         Homo sapiens
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Matches
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The invention relates to a novel compound comprising an optionally stabilised nucleic acid or its analogue encoding a peptide, protein or other biological modifier, aptamer, antisense sequence, or antisense mimic conjugated directly or through a linker to a ligand for the transcobalamin receptor or intrinsic factor receptor. A compound of the invention has cytostatic, antiviral, anti-HIV, hepatotropic, antiinflammatory, virucide, tuberculostatic, and protozoacide activity. The compounds may be useful in the manufacture of a medicament for the delivery of material that affects gene translation or gene transcription and modulates a biological process, in medical therapy. A compound is also useful for treating cancer, viral diseases such as infection caused by HIV, hepatitis (hepatitis B, hepatitis C and hepatitis D), herpes, TB, Epstein-Barr virus, malaria, influenza virus, para influenza virus, mumps virus, adenoviruses, respiratory syncytial virus, rumps relativoviruses, gastroenteriis viruses, rubella virus, rubella viruses, rubella virus, rubella viruses, rubella viruses, rubella viruses, rubella virus, rubella viruses, rubel
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Best Local Similarity 85.0%;
Matches 17; Conservative
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                                                                              WO2003025139-A2.
                       Homo sapiens.
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                                                                                                                                      27-MAR-2003
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Synthetic.

Location/Qualifiers

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                                                                                                                                                                                                                                                                                     The present invention describes a method for presuming a binding molecule of a ligand of a protein with unknown ligand comprises: (a) obtaining classification data of proteins with known ligands based on the amino acid sequences wherein the alignments of such known ligands correspond respectively to the ligands or ligand types; (b) using the classification data to provide ligand-determining residue-ligand classification data that show the co-relationships among ligand-determining residues and ligands or ligand types to thereby obtaining the alignments of proteins with unknown ligands for specifying 1 or more ligand-determining residue positions; (c) applying the data at least concerning the ligand determining residue-ligand classification data; and (d) estimating the ligand or its type of the protein with the unknown ligand.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ligands can have neuroprotective, vasotropic, gastrointestinal, immunological and cytostatic activities, and can be used for modulating g protein-coupled receptor (GPCR) binding. The method can be used for cestimating and presuming ligands or their types directly binding e.g. to GPCR from sequence data, applicable in identifying proteins and analysis of their functions, and in drug development for preventing or treating diseases of the central nervous system, circulatory, digestive and immune systems, cancer, and metabolic diseases. The present sequence represents a PCR primer for human TGR23-2 ligand, which is used in an example from
                                                                                                                                                                                                          Computer-based method for estimating and presuming ligands or their types
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antiviral screening; immunoassay; ss; nuclease inhibitor; gene therapy; AIDS; bacterial infection; viral infection; protozoan infection; abnormal cell proliferation; tumour formation; atherosclerosis.
                                                                                                                                                                                                                       that directly bind to e.g. GPCR from sequence data, applicable in identifying proteins and functional analysis, and in drug development
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antiviral screening immunoassay oligonucleotide #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                            Example; Page 98; 107pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               396 TGAGGTGCAGTCTCCAGTGA 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
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                                                                   11-JUL-2002; 2002WO-JP007057,
                                                                                               12-JUL-2001; 2001JP-00212749
                                                                                                                       (TAKE ) TAKEDA CHEM IND LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 85.0
nes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the present invention
                                                                                                                                                                              WPI; 2003-229505/22
             WO2003007187-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unidentified
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                                        23-JAN-2003
                                                                                                                                                    Inooka H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New nuclease resistant compounds, useful as therapeutics, diagnostic agents, or research reagents, or for treating an organism with a disease associated with the undesired production of a protein, e.g. bacterial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a nuclease resistant compound that hybridises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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0
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15.0%; Pred. No. 6e+02;
ve 0; Mismatches 3; Indels
                                                                                           2'-0-methyl nucleotides"
                                                                                                                                                                     /mod_base= OTHER
/note= "OTHER = 2'-O-methyl nucleotides"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 34; Page 31; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          130 CGGATGAAGAAGATCAAACG 149
                                                                    OTHER
                                                                    /mod_base= OTHER
/note= "OTHER =
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                                                                                                                                                                                                                                                                                                                                                                                     90US-00463358.
90US-00566977.
91WO-US00243.
91US-00814961.
92US-00835932.
92US-00835932.
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95US-00471973.
98US-00135202.
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                                                *tag= a
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Best Local Similarity 85.0'
Matches 17; Conservative
                                                                                                                       .21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kawasaki AM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-438873/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              infections or AIDS.
                                                                                                                                                                                                                                              US2003004325-A1
Key
modifed_base
                                                                                                                       modifed base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-DEC-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-JUN-1994;
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                                                                                                                                                                                                                                                                                               02-JAN-2003
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Antiviral screening; immunoassay; ss; nuclease inhibitor; gene therapy; AIDS; bacterial infection; viral infection; protozoan infection; abnormal cell proliferation; tumour formation; atherosclerosis.
                                                                                                                   'note = "OTHER = 2'-0-methyl nucleotides"
                                                                                     /note= "OTHER = 2'-0-methyl nucleotides"
                                                         location/Qualifiers
                                                                              base= OTHER
                                                                                                    /*tag= b
/mod_base= OTHER
                                                                                                                                                                           90US-00463358.
90US-00566977.
91WO-US000243.
91US-00814961.
92US-00835932.
92US-008364634.
                                                                                                                                                              2001US-00996263
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                                                                                                                                                                                                                                             95US-00471973
                                                                                                                                                                                                                                                     98US-00135202
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                                                                                            15. .21
                                                                         *tag=
                                                                                                                                                                                                                                                                    PHARM INC
                                                                                                                                                                                                                                                                                  Cook PD, Kawasaki AM;
                                                                                /mod
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                                                                                                                                 US2003004325-A1
                                                                                                                                                                                   13-AUG-1990;
11-JAN-1991;
12-AUG-1991;
24-DEC-1991;
05-MAR-1992;
01-JUL-1992;
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                                                                                                                                                              28-NOV-2001;
                                   Unidentified
                                                               modifed base
                                                                                              modifed base
                                                                                                                                               02-JAN-2003
                                                                                                                                                                                                                               23-DEC-1992
                                                                                                                                                                                                                                      21-JUN-1994
                                                                                                                                                                                                                                             06-JUN-1995
                                                                                                                                                                                                                                                      17-AUG-1998
                                          Synthetic.
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The invention relates to a nuclease resistant compound that hybridises with RNA or DNA, comprising covalently-bound nucleosides that individually include a ribose of deoxyribose sugar portion and a base portion. The nuclease resistant compounds are useful as therapeutics, diagnostic agents, or research reagents. The compounds are also useful for modulating the activity of an RNA or DNA molecule, or for treating an organism with a disease associated with the undesired production of a protein, e.g. bacterial, viral or protozoan infections, AIDS, abnormal cell proliferation and tumour formation, or atherosclarosis. The present sequence represents the antiviral screening immunoassay oligonucleotide
wew nuclease resistant compounds, useful as therapeutics, diagnostic agents, or research reagents, or for treating an organism with a disease associated with the undesired production of a protein, e.g. bacterial infections or AIDS.
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Gaps
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0
                         Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
                              0.9%;
                                                             17; Conservative
                              Query Match
Best Local Similarity
                                                             Matches
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cobalamin-bound detectable; radioimaging; infectious disease; cardiovascular disorder; antibiotic; antiviral agent; ss.

WO2003026674-A1.

Synthetic

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CGGATGAAGAAGATCAAACG 149
                cechachachachachace 2
 130
                21
                g
  8
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The present invention relates to a cobalamin-bound detectable or therapeutic agent in combination with a cobalamin transport protein. In the manufacture of a medicament to increase the uptake of detectable agent useful in radioimaging or therapeutic agent for treatment of a disorder associated with abnormal cellular proliferation, an infectious disease and cardiovascular disorder; as an antibiotic or antiviral agent, for transcription of al factor. The method increases efficiency of vitamin B12 or vitamin B12 conjugated materials. The presents sequence represents an antisense nucleotide that can be conjugated to the carriers
                                                                                          Antisense DNA #14 that can be conjugated to the carriers of invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense DNA #1 that can be conjugated to the carriers of invention.
                                                                                                                                                                                                                                                                                                                                                                                                                  Composition useful for the treatment of e.g. infectious disease, comprises a cobalamin-bound detectable or therapeutic agent in combination with a cobalamin transport protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
                                                                                                                        cobalamin-bound detectable; radioimaging; infectious disease; cardiovascular disorder; antibiotic; antiviral agent; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                           MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 4; SEQ ID NO 14; 97pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       described in the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N
ADC24666 standard; DNA; 21 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGCAAGAAGAAGAGCAAACG
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                                                                                                                                                                                                                                                               30-SEP-2002; 2002WO-US031038
                                                                                                                                                                                                                                                                                            28-SEP-2001; 2001US-0326183P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADC24653 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 85.0 es 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-393314/37.
                                                                                                                                                                                                    WO2003026674-A1.
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                                                             18-DEC-2003
                                                                                                                                                                                                                                    03-APR-2003
                                                                                                                                                                                                                                                                                                                                                          Collins DA;
                                                                                                                                                                       Synthetic
                                ADC24666;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
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Ecker DJ, Manoharan M;

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The invention relates to formulations and methods which enhance the local and systemic uptake and delivery of oligonuclectides and nucleic acids via non-parenteral routes of administration. The formulation is used for treating inflammatory bowel disease, e.g. ulcerative colitis, Crohn's disease or inflammatory bowel disease, in animals (e.g. human). It can slace be used for treating undue cellular proliferation. The present sequence is an antisense oligonuclectide targetted against Human cytomegalovirus (HCWV) gene. This sequence is used to illustrate the
                                                                                                                                                                                                                                                                                                                                                   Formulation, useful for treating inflammatory bowel disorder, e.g. ulcerative colitis or Crohn's disease, comprises oligonucleotide for rectal delivery.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Inflammatory bowel disorder; ulcerative colitis; Crohn's disease; cellular proliferation; phosphorothioate backbone; antisense; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'note= "Phosphorothioate backbone"
                                                                                                                                                                                                                                                                                            Tillman L, Hardee GE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 2; Page 11; 45pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         130 CGGATGAAGAACAACG 149
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 CGCAAGAAGAGAGCAAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                   21-DEC-2001; 2001US-00029598.
                                                                                     97US-00886829.
                                                                                                                          99US-00315298
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       L. .7
'*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag=
                                                                                                                                                            TENG C.
COOK P D.
TILLMAN L.
HARDEE G E.
                                                                                                                                                                                                                                                     MANO/) MANOHARAN M.
                                                                                                                                                                                                                                                                                                                            WPI; 2003-596370/56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
ses 17; Conserv
                                                                                                                                                                                                                                                                                          Cook PD,
                                                                                                                                                                                                                                  ECKER D J.
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modified_base
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                                                                                                     01-JUL-1998;
20-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unidentified
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               27-FEB-2003
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                                                                                                                                                                                              (TILL/)
(HARD/)
(ECKE/)
                                                                                                                                                                                                                                                                                          Teng C,
                                                                                                                                                              (TENG/)
                                                                                                                                                                                 (COOK/)
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ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
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                                                                                                                                                                                                                                                                                                                      The present invention relates to a cobalamin-bound detectable or therapeutic agent in combination with a cobalamin transport protein. In the manufacture of a medicament to increase the uptake of detectable agent useful in radioinaging or therapeutic agent for treatment of a disorder associated with abnormal cellular proliferation, an infectious disease and cardiovascular disorder; as an antibiotic or antiviral agent; for transcription of al factor, the method increases efficiency of vitamin B12 or vitamin B12 conjugated materials. The presents sequence represents an antisense nucleotide that can be conjugated to the carriers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human cytomegalovirus (HCMV) gene specific antisense oligo, ISIS 2922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Inflammatory bowel disorder; ulcerative colitis; Crohn's disease; cellular proliferation; Human cytomegalovirus; HCMV; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mod_base= OTHER
/mote= "Phosphorothioate backbone; Optionally all
cytidines are 5-metyl cytidines"
                                                                                                                                                                                                             Composition useful for the treatment of e.g. infectious disease, comprises a cobalamin-bound detectable or therapeutic agent in combination with a cobalamin transport protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'note= "Optionally 2'methoxyethyl nucleotides'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "Optionally 2'methoxyethyl nucleotides'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 15.2; DB 1; Length 21; Pred. No. 6e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                     (MAYO-) MAYO FOUND MEDICAL EDUCATION & RES.
                                                                                                                                                                                                                                                                                      Example 4; SEQ ID NO 1; 97pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    iocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            described in the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag= b
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= c
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 cechaghaghaghage 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.98;
                              30-SEP-2002; 2002WO-US031038.
                                                                  2001US-0326183P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAD59026 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human cytomegalovirus.
                                                                                                                                                                             WPI; 2003-393314/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2003040497-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       modified_base
                                                                  28-SEP-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-DEC-2003
                                                                                                                                         Collins DA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
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RESULT 462 AAD59026/c

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Gaps

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CMV; ss; antisense; virucide; anti-HIV; antiarteriosclerotic; cytostatic; 2'-fluoro substituent; AIDS; atherosclerosis; cancer; DNA-RNA hybrid.
                                                                                                                                                                                                                                              Modified oligonucleotides useful as therapeutics, diagnostics and research agents comprises several covalently bound nucleosides joined by internucleoside linkages.
                                                                                                                                                                                                                                                                                        Example 34; SEQ ID NO 18; 48pp; English
                                                                                                                     90US-00463358.
90US-00566977.
92US-00835932.
95US-00468037.
                                                                                                   2003US-00352586
                                                                                                                                                               99US-00389283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                    (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                       Kawasaki AM;
                                                                                                                                                                                                                            WPI; 2003-831271/77.
                                      Human herpesvirus 5.
                                                           US2003187240-A1
                                                                                                   28-JAN-2003;
                                                                                                                                 13-AUG-1990;
05-MAR-1992;
                                                                                                                       11-JAN-1990;
                                                                                                                                                               02-SEP-1999;
                                                                               02-OCT-2003
                                                                                                                                                       06-JUN-1995
                                                                                                                                                                                                       Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 465
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to formulations and methods which enhance the local and systemaic uptake and delivery of oligonucleotides and nucleic acids via non-parenteral routes of administration. The formulation is used for treating inflammatory bowel disorders, e.g. ulcerative colitis, Crohn's disease or inflammatory bowel disorders, e.g. ulcerative colitis, Crohn's also be used for treating undue cellular proliferation. The present sequence is an antisense oligonucleotide used to illustrate the method of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                              Formulation, useful for treating inflammatory bowel disorder, e.g. ulcerative colitis or Crohn's disease, comprises oligonucleotide for
                                                                                                                                                                                                                                                                                                                                                      Manoharan M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 15.2; DB 1; Length 21; Pred. No. 6e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                      Ecker DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                      Hardee GE,
                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 43; 45pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGCAAGAAGAGAGCAAACG 2
                                                                                                               /*tag= g
/mod_base= m5c
                                                                                                                                             /*tag= h
/mod base= m5c
                                                                                         mod_base= m5c
mod base= m2c
                              'mod_base= m5c
                                                             /mod_base= m5c
                                                                                                                                                                                                                                                                                                                                                      Tillman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.9%;
                                                                                                                                                                                                                                                98US-00108673
99US-00315298
                                                                                                                                                                                                                 21-DEC-2001; 2001US-00029598
                                                                                                                                                                                                                                        97US-008B6829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 0.9
Best Local Similarity 85.0
Matches 17; Conservative
                                                   *tag=
                                                                                  *tag=
                     *tag=
                                                                                                                                                                                                                                                                                                  TILLMAN L.
HARDEE G E.
ECKER D J.
MANOHARAN M.
                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-596370/56
                                                                                                                                                                                                                                                                              TENG C.
COOK P D.
                                                                                                                                                                                                                                                                                                                                                      Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                                                    rectal delivery.
                                                                                                                                                                           US2003040497-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  invention
          modified base
                                       modified base
                                                                     modified_base
                                                                                                    modified_base
                                                                                                                                  modified base
                                                                                                                                                                                                                                       01-JUL-1997;
                                                                                                                                                                                                                                                          20-MAY-1999;
                                                                                                                                                                                                27-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                  (TILL/)
(HARD/)
(ECKE/)
(MANO/)
                                                                                                                                                                                                                                                                                                                                                      Teng C,
                                                                                                                                                                                                                                                                                (TENG/)
                                                                                                                                                                                                                                                                                          COOK/)
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The invention relates to a modified oligonucleotide comprising several covalently bound nucleosides including a ribose or deoxyribose sugar portion and a base portion. The nucleosides are joined together by internucleoside linkages such that the base portion of the nucleosides for internucleoside linkages such that the base portion of the nucleosides of internucleoside linkages such that the base portion of the nucleosides includes a confideranosyl moiety bearing a 2'-fluoro substituent. The antisense oligonucleotides of the invention are useful as therapeutics, diagnostics and research agents e.g. for the treatment of various viruses (e.g. ALDS), for modulating the production of proteins by an organism, treating an organism having a disease involving an undesired production of a protein (e.g. atherosclerosis, cancer), detecting the presence or absence of abnormal RNA molecules, or abnormal or inappropriate expression of normal RNA molecules, or abnormal or inappropriate expression of normal RNA molecules, or abnormal or inappropriate or expression of normal RNA molecules, or abnormal or inappropriate or agents. The compounds have improved stability to enzymatic degradation with various intracellular and extracellular nucleases, and improved billy to bind to a specific DNA or RNA with fidelity compared to wildtype DNA-DNA and RNA-DNA and RNA-DNA and RNA-DNA duplexes and phosphorus-modified oligonucleotide cuples expers. The present sequence is an antisense oligonucleotide of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antiviral screening antisense oligonucleotide ISIS #4325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention targeting CMV replication.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGCAAGAAGAAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADI12091 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-APR-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADI12091;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADI12091/c

ID ADI120

XC ADI120

XX

DT 15-APR

XX

XX

XX

XX

XX
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CMV antisense oligonucleotide #1.

(first entry)

15-JAN-2004

ADD44701;

0 x 2 x 5 x 8

ADD44701 standard; DNA;

ADD44701,

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15-APR-2004 (first entry)
    8XCCCCCCCCCCCX8X1112X8X11X8X333333X6X6X6X121111111111X8X4X4X8X11
                                                                                                                                                                                                                                                                                                                                                                                                                                                              oligonucleotides comprising at least one modified 2' deoxyfuranosyl group. The modified oligonucleotides are disclosed as being useful for modulating the production of a protein by an organism, and especially for production of a protein by an organism, and especially for production of a protein. The oligonucleotides may be used to treat diseases caused by viruses or other agents. The oligonucleotides may also be used for diagnostic methods for detecting the presence or absence of abnormal RNA molecules, or for detecting the inappropriate expression of normal RNA molecules in an organism or cell. Oligonucleotides of the invention that selectively bind RNA may also be useful as research reagents. The new oligonucleotides are nuclease resistant and hybridise to RNA or DNA targets with high strength and specificity. The present sequence represents an antiviral screening antisense oligonucleotide.
                                                                           /*tag= b
/mod_base= OTHER
/note= "OTHER= Phosphorothioate. 1-6 and 17-21 are 2'-O-
methyl"
ss; nuclease resistant; mixed sequence; 2'-deoxyfuranosyl; antisense; DNA-RNA hybrid.
                                                                                                                                                                                                                                                                                                                                                                                    Nuclease resistant mixed sequence oligonucleotides useful as therapeutics, diagnostics, and research agents comprise at least one modified 2'-deoxyfuranosyl group.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a nuclease resistant mixed sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15.2; DB 1; Length 21;
15.0%; Pred. No. 6e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 21 BP; 0 A; 6 C; 5 G; 6 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 34; SEQ ID NO 18; 48pp; English.
                                                       Location/Qualifiers
                                                                                                                                                                                                                                                      90US-00566977.
                                                                                                                                                                                                                       99US-00389283
                                                                                                                                                                                                                                                                            92US-00854634
                                                                                                                                                                                                                                           90US-00463358
                                                                                                                                                                                                                                                                                        95US-00468037
                                                                                                                                                                                                                                                                                                 98US-00035357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     85.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best_Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                           17. .21
/*tag=
                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                              Kawasaki AM;
                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-566474/53.
                                                         Key
modified_base
                                                                                                                                                                            US6531584-B1
                                                                                                                                                                                                                       32-SEP-1999;
                                                                                                                                                                                                                                                                                                  05-MAR-1998;
                                                                                                                                                                                                   11-MAR-2003
                                                                                                                                                                                                                                              11-JAN-1990
                                                                                                                                                                                                                                                       13-AUG-1990
05-MAR-1992
                                                                                                                                                                                                                                                                            01-JUL-1992
                                                                                                                                                                                                                                                                                        06-JUN-1995
                                   Synthetic
                                                                                                                                                                                                                                                                                                                                           Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                        misc RNA
                                                                                                                                              misc_RNA
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The invention relates to a nuclease resistant mixed sequence oligonucleotides comprising at least one modified 2'-deoxyfuranosyl group. The modified oligonucleotides are disclosed as being useful for modulating the production of a protein by an organism, and especially for treating a disease in an organism which is characterised by the undesired production of a protein. The oligonucleotides may be used to treat diseases caused by viruses or other agents. The oligonucleotides may also be used for diagnostic methods for detecting the presence or absence of abnormal RNA molecules, or for detecting the inappropriate expression of normal RNA molecules in an organism or cell. Oligonucleotides of the invention that selectively bind RNA may also be useful as research.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                       /mod_base= OTHER
/note= "OTHER= Phosphorothioate. 1-7 and 15-21 are 2'-O-
methy1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          reagents. The new oligonucleotides are nuclease resistant and hybridise to RNA or DNA targets with high strength and specificity. The present sequence represents an antiviral screening antisense oligonucleotide.
                                           ss; nuclease resistant; mixed sequence; 2'-deoxyfuranosyl; antisense; DNA-RNA hybrid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nuclease resistant mixed sequence oligonucleotides useful as therapeutics, diagnostics, and research agents comprise at least modified 2'-deoxyfuranosyl group.
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Antiviral screening antisense oligonucleotide ISIS #4326.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 0 A; 6 C; S G; 4 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No 6e+02;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 34; SEQ ID NO 19; 48pp; English.
                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        90US-00463358.
90US-00566977.
92US-00835932.
92US-00854634.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-00389283
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                                                                                                                                                                                                                                                                                                                                                           /*tag=
15. .21
/*tag=
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*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cook PD, Kawasaki AM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-566474/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                            Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US6531584-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-AUG-1990;
05-MAR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-JAN-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-JUN-1995
                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                     misc_RNA
                                                                                                                                                                                                                                                                                                                                                                                         misc_RNA
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ABZ75968/c
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.. 0

Gaps

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3; Indels

130 CGGATGAAGAAGATCAAACG 149 cecaagaagaagcaaace 2

21

원

ADI12092 standard; DNA; 21 BP

ADI12092

RESULT 466
ADI12092/c
ID ADI1209
XX
AC ADI1209
XX

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The present invention describes a delayed release oral formulation (A), giving enhanced gastrointestinal (GI) absorption of a drug (I). (A) comprises a first set of particles containing (I) and a penetration enhancer (II) and a second set of particles containing (II) in a delayed release coating or matrix (III). (A) is used for enhancing the absorption of (I) in mammals, especially humans. Typical disorders to be treated include ulcerative collifis, rheumancied architis, Crohn's disease, inflammatory bowel disease and abnormal cellular proliferation. When the particles release (I) and (II) at a first location in the GI tract elease pulse) and intestines), (II) is rapidly absorbed (during a first release pulse) and is often present in insufficient amount to promote absorption of the entire dose of (I). This problem is solved by providing further (II) in delayed release form in the particles, so that absorption
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        is completed in a second pulse. The present sequence represents an ary oligonucleotide from the present invention which inhibits HCMV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G protein-coupled receptor; GPCR; TGR23-2; TGR23-1; TGR23; anorectic; cytostatic; obesity disorder; cancer; appetite stimulation; PCR primer;
                                                                                                                                                                                                                                                                                                                                                              Pulsed release oral formulation providing enhanced gastrointestinal absorption, comprises first particles containing drug and penetration enhancer and second particles containing delayed release penetration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.9%; Score 15.2; DB 1; Length 21; 55.0%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                   /note= "phosphorothioate linkages"
                                                                                                                                                                                                                                                                              Hardee GE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    exemplary oligonucleotide from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human TGR23-2 PCR primer SEQ ID NO:9.
                                                                                                                                                                                                                                                                            Geary RS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 28; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        130 CGGATGAAGAAGATCAAACG 149
/mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGCAAGAGAGAGCAAACG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP
                                                                                                                                                22-AUG-2002; 2002WO-US026924.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-SEP-2002; 2002WO-JP009446.
                                                                                                                                                                                            22-AUG-2001; 2001US-00944493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          85.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC68813 standard; DNA; 21
                                                                                                                                                                                                                                                                            Weinbach SP, Tillman LG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                      WPI; 2003-354422/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003025179-A1.
                                                                WO2003017940-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-JUL-2003
                                                                                                        06-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-MAR-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                enhancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACC68813/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Preventing desulfurization of oligonucleotide comprising phosphorothioate linkages in bi-phasic/multi-phasic formulation, by adding to formulation an antioxidant that partitions into aqueous phase of the formulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to preventing desulphurization of an oligonuclectide or its bioequivalent comprising one or more phosphorchioate linkages in a bi-phasic or multi-phasic formulation. method involves including in the formulation an antioxidant which partitions into the aqueous phase of the formulation. The method is useful for increasing the stability of oligonucleotide comprising phosphorothioate linkages. Sequences ABZ75968-976 represent specific oligonucleotides that target genes and that may be employed in the formulations of the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Inhibition; phosphorothioate; delayed release oral formulation; anhanced gastrointestinal absorption; ulcerative colitis; rheumatoid arthritis; Crohn's disease; inflammatory bowel disease; abnormal cellular proliferation; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.9%; Score 15.2; DB 1; Length 21;
35.0%; Pred. No. 6e+02;
ive 0; Mismatches 3; Indels
                                                                                                                                                                        ICAM-1; desulphurization; antioxidant; HCMV; antisense; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HCMV inhibitory antisense oligonucleotide SEQ ID NO:3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                HCMV mRNA targeting oligonucleotide ISIS 13312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 23; 51pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGGATGAAGAAGATCAAACG 149
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    BP.
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                                                                                                                                                                                                                                                                                                                                              11-JUL-2002; 2002WO-US022038.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    85.0%;
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    2
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                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
      DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . 21
                                                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-229426/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mehta R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
ses 17; Conserv
    ABZ75968 standard;
                                                                                                                                                                                                                                                          WO2003005822-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Key
modified base
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                                                                                      29-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-JUN-2003
                                                                                                                                                                                                                                                                                                    23-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Krotz AH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                    Synthetic
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                                            ABZ75968
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ACC49171/c
XX
AC ACC491
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DE HCMV in
XX
KW Inhibi
KW enhanc
KW enhanc
KW enhanc
KW sheum
KW Synthe
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THEUM
KW THEUM

RESULT 468

Db

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Matches

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Gaps

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(CNRS ) CNRS CENT NAT RECH SCI
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85.0%;
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                                                                                                                                                                                                                                                                                                                              ADI30512 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                     22-APR-2004 (first entry)
                                                                                                                                                                                                                         Local Similarity 85.0
nes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Granier C,
   WPI; 2003-313356/30.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2004005350-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Devaux C,
Chardes T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                   ADI30512;
                                                                                                                                                                                                                                                                                                          RESULT 471
                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                    ADI30512,
   ਨੇ
                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                  ..
                                                                                                                                                                                      invention describes polypeptides (I) and their amides, esters
                                                                                                                                                                                             and salts which bind to the human G protein-coupled receptor (GPCR) proteins TGR23-1 and TGR23-2. TGR23 proteins have anorectic and cytostatic activities. (I) can be used in the treatment, prevention and diagnosis of obesity disorders and cancer (including cancer of the intestines, colon, breast, lung (including non-small cell lung cancer) prostate, oesophagus, stomach, liver, pancreas, kidney, womb, ovary, testis, bladder and brain, and blood cancers). (I) can also be used in appetite stimulation. Acc68807 to Acc68800 and ABP97281 to ABP97280 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           G protein-coupled receptor; GPCR; TGR23-2; TGR23-1; TGR23; anorectic; cytostatic; obesity disorder; cancer; appetite stimulation; PCR primer;
                                                                                                                                  Polypeptides binding to G-protein coupled receptors TGR23-1 and TGR23-2 for prevention and treatment of obesity, cancer and appetite disorders.
                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                   Matsumoto H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matsumoto H;
                                                                                                                                                                                                                                                                                                                           0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                   Kitada C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kitada C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human GPCR TGR23-2 PCR primer SEQ ID NO:115
                                                                                  Sato S,
                                                                                                                                                                 Example 2; Page 245; 338pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sato S,
                                                                                                                                                                                                                                                                                                                                                                   396 TGAGGTGCAGTCTCCAGTGA 415
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         14-SEP-2001; 2001JP-00279232.
12-OCT-2001; 2001JP-00315148.
10-APR-2002; 2002JP-00108621.
                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC68881 standard; DNA; 21 BP
                                       10-JUN-2002; 2002JP-00169232
                                                                                 Miya H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001JP-00315148.
2002JP-00108621.
2002JP-00169232.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Miya H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-SEP-2002; 2002WO-JP009446.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-SEP-2001; 2001JP-00279232
                                                             (TAKE ) TAKEDA CHEM IND LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (TAKE ) TAKEDA CHEM IND LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 85.v
To 17; Conservative
                                                                                          Shimomura Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hayashi K, 1
Shimomura Y;
                                                                                                                WPI; 2003-313356/30
                                                                                 Hayashi K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2003025179-A1.
         14-SEP-2001;
12-OCT-2001;
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10-APR-2002;
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                                                                                                                                                                                       The present
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
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                                                                                Mori M,
Nagi I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mori M,
Nagi T,
                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 470
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                                                                                                                                                                                                                The present invention describes polypeptides (1) and their amides, esters and salts which bind to the human G protein-coupled receptor (GPCR) proteins TGR23-1 and TGR23-2. TGR23 proteins have anorectic and cytostatic activities. (1) can be used in the treatment, prevention and diagnosis of obesity disorders and cancer (including cancer of the intestines, colon, breast, lung (including non-small cell lung cancer), prostate, oesophagus, stomach, liver, pancreas, kidney, womb, ovary, testis, bladder and brain, and blood cancers). (1) can also be used in appetite stimulation. ACC68807 to ACC68890 and ABP97241 to ABP97280 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mutant Fab fragment of anti-CD4 antibody 13B8.2, useful for treatment or prevention of e.g. autoimmune diseases, transplant rejection, cancer and viral infection, binds to CD4 receptor.
Polypeptides binding to G-protein coupled receptors TGR23-1 and TGR23-2 for prevention and treatment of obesity, cancer and appetite disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to a novel mutant Fab fragment (A) of the anti-CD4 antibody 1388.2 that binds to CD4 and has a mutation of at least one residue in the variable domain (Vh) of the heavy chain and/or in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         anti-CD4; 13B8; 2; Fab fragment; CD4; immunosuppressive; antirheumatic; antiarthritic; antipsoriatic; dermatological; antiinflammatory; cytostatic; virucide; anti-HIV; autoimmune disease; rheumatoid polyarthrits; psoriasis; lupus erythromatosus; immunological intolerance reaction; transplantation; graft versus host disease; cancer; immunodeficiency; HIV; PCR; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Murine anit-CD4 Fab 13B8.2 mutation PCR primer VhF100KF SEQ ID NO:39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cerutti M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; SEQ ID NO 39; 78pp; French.
                                                                                                                                          Example 39; Page 327; 338pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Briant-Longuet L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              396 TGAGGTGCAGTCTCCAGTGA 415
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The present invention relates to a method for deprotection of phosphorus-protected oligonucleotides. The method involves contacting the phosphorus reprotected oligonucleotide with non-malodorous deprotecting agent to remove the phosphorous protecting group (which is optionally substituted alkyl). The method is useful for the preparation of phosphorus protected oligonucleotides, which is useful for the preparation of phosphorus protected compound. The present sequence is an oligonucleotide, used to illustrate the method of the invention.
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                     has immunosuppressive, antirheumatic, antiarthritic, antipsoriatic, dermatological, antiinflammatory, cytostatic, virucide, and anti-HIV activity. A mutant fragament of the invention is useful for treating and preventing autoimmune diseases, specifically rheumatoid polyarthritis, psoriasis or lupus erythromatosus; immunological intolerance reaction, especially where induced by transplantation or graft versus host disease; cancers in which CD4 is implicated (especially CD4+ or Cesari lymphoma); and immunodeficiency states associated with viral infection, especially HIV. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    preparation of pharmaceutical compound involves contacting the phosphorus -protected oligonucleotide with non-malodorous deprotecting agent.
domain (Vkappa) of the light chain. A protein of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 15.2; DB 1; Length 21; Pred. No. 6e+02; 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide #3, used in phosphorus deprotection method.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                         G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Deprotection; phosphorothicate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1628 GCCCCAGCAGCCAGCGCTG 1647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 7; Page 39; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 GCCCCAGTAAGCAGCGCCTG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.9%;
85.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUL-2003; 2003WO-US022211.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-JUL-2002; 2002US-00201799.
                                                                                                                                                                                                                                                                                                                                                                                                                            8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 3 A; 6 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-169187/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-JAN-2004
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                                                                                                                                                                                                                                                                                                                                                                  invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADI29043;
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AD129043/7

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This invention relates to novel compositions that comprise short interfering RNA (siRNA) molecules, which can be used to inhibit angiogenesis. Specifically, it refers to siRNAs that target and cause angiogenesis. Specifically, it refers to siRNAs that target and cause raciogenesis. Specifically, it refers to siRNAs that target and cause RNAi-induced degradation of mRNA from human vascular endothelial growth carcor (VBGF), the VBGF receptor (FIL-1) and the FIk-1/KDR (kinase domain composition genes, as well smutants derived thereof. The present invention describes sense and antisense RNA strands that form an RNA duplex and bind to the target mRNA, such that expression is inhibited and the target degraded. As such, siRNA administered in combination with a therapeutic gent is useful for treating diseases associated with anglogenesis and the overexpression of VEGF, which include diabetic retinopathy, agenciated macular degeneration, inflammatory disease, psoriasis and rehumatoid arthritis. Furthermore, it can be used to treat various cancers including breast, retinoblastoma, Wilm's tumour and lymphoma. Accordingly, these compositions exhibit cytostatic, antidiabetic, ophthalmological, antiinflammatory, antipsoriatic, antidiabetic and antiathritic activities. This oligomucleotide is a human Flk-1/KDR DNA oligo, a target for siRNA inhibition of the invention.
                                                                                                                                                                                                                                                                  human; ss; short interfering RNA; siRNA; angiogenesis; vascular endothelial growth factor; VEGF, VEGF receptor; Flt-1; Flk-1/KDR; kinase domain region; diabetic retinopathy; age-related macular degeneration; inflammatory disease; psoriasis; rheumatoid arthritis; cancer; breast; retinoblastoma; wilm's tumour; lymphoma; oytostatic; antidiabetic; ophthalmological; antiinflammatory; antipsoriatic; antirheumatic; antiarthritic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel short interfering RNA (siRNA) comprises sense and antisense RNA strands, useful for inhibiting expression of human vascular endothelial growth factor mRNA, for treating angiogenic disease, e.g. diabetic
                                                                                                                                                                                                                               Human Flk-1/KDR DNA sequence, a target for siRNA inhibition SeqID 577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Length 21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 10 A; 7 C; 3 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. 6e+02;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; SEQ ID NO 577; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%; Score 15.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         974 ACCGAGACCTCAAGCCCCAG 993
21 cechachachachachace
                                                                                                           BP
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14-NOV-2002; 2002US-00294228.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-JUL-2003; 2003WO-US022444.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           85.08;
                                                                                                           ADJ97804 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYPE-) UNIV PENNSYLVANIA.
                                                                                                                                                                                              (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               retinopathy and cancer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-203472/19.
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Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2004009769-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                              06-MAY-2004
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                                                                                                                                                     ADJ97804;
                                                                    RESULT 473
                                                                                       ADJ97804
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Gaps

; 0

0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels

; 0

17; Conservative

Matches

Query Match Best Local Similarity

ADK69873/c

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nucleoside with 240 modification are prepared by phosphitylaring 5'-
hydroxyl of a nucleic acid moiety having a nucleoside with 2'
modification in an acetonitrile containing solvent mixture to form a
phosphite intermediate; and oxidising the phosphite intermediate with an
acetyl disulfide in an acetonitrile for a time to effect conversion of
the phosphite intermediate to phosphorothioate. The invented method
achieves high yields and greater efficiency. The present sequence is
sulphurised oligonucleotide used in the exemplification of the invention.
                                                                            Phosphorothioate backbone; sulphurised oligonucleotide; RNA-DNA hybrid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Preparation of phosphorothioate oligonucleotides involves oxidizing phosphite intermediate with acetyl disulfide in acetonitrile for time effect conversion of phosphite intermediate to phosphorothioate.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to phosphorothicate oligonuclectides having
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                  note = "Phosphorothioate backbone"
                                                                                                                                                                                                                                                                                    /*tag= a
/label= RNA
/note= "2'-methoxyethyl residues"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21 BP; 0 A; 6 C; 5 G; 4 T; 6 U; 0 Other;
                                     Sulphurised oligonucleotide #7 (RNA-DNA hybrid)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cheruvallath ZS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 9; SEQ ID NO 7; 8pp; English
                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                            mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGCAAGAGAGAGCAAACG 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 L2-DEC-2002; 2002US-00181200.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-JAN-2000; 2000US-00481486.
10-JAN-2001; 2001WO-US000715.
                                                                                                                                                                                                                                                                                                                                                               /*tag= c
/label= RNA
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 06-MAY-2004 (first entry)
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Best Local Similarity 85.09
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (COLE/) COLE D L.
(RAVI/) RAVIKUMAR V T.
(CHER/) CHERUVALLATH Z S.
                                                                                                                                                                                                                                                                                                                                           15. .21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cole DL, Ravikumar VT,
                                                                                                                                                                                           ...21
*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                      US2003212267-A1
                                                                                                                                                                                       modified base
                                                                                                                                    Unidentified
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                                                                                                                                                                                                                                                                    misc_RNA
                                                                                                                                                                                                                                                                                                                                             misc_RNA
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   셤
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to phosphorothioate oligonucleotides having nucleoside with 240 modification are prepared by phosphitylating 5'-hydroxyl of a nucleic acid moiety having a nucleoside with 2' modification in an acetonitrile containing solvent mixture to form a phosphite intermediate; and oxidising the phosphite intermediate with an acetyl disulfide in an acetonitrile for a time to effect conversion of the phosphite intermediate to phosphorothioate. The invented method achieves high yields and greater efficiency. The present sequence is sulphurised oligonucleotide used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Preparation of phosphorothioate oligonucleotides involves oxidizing phosphite intermediate with acetyl disulfide in acetonitrile for time to effect conversion of phosphite intermediate to phosphorothioate.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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15.0%; Pred. No. 6e+02;
tve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                              Phosphorothioate backbone; sulphurised oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                              /mod_base= OTHER
/note= "Phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cole DL, Ravikumar VT, Cheruvallath ZS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 5; SEQ ID NO 3; 8pp; English.
                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                         Sulphurised oligonucleotide #3
ACCGAGACCTAAAAACCCAG
                                                                                            ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cecaagaagaagcaaace
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-JAN-2000; 2000US-00481486.
10-JAN-2001; 2001WO-US000715.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85.0%;
                                                                                          ADK69873 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                         1. .21
/*tag= a
                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (COLE/) COLE D L.
(RAVI/) RAVIKUMAR V T.
(CHER/) CHERUVALLATH Z S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2004-069376/07.
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Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                      JS2003212267-A1
                                                                                                                                                                                                                                                                                                                       Key
modified_base
                                                                                                                                                                                                                                                                                    Unidentified
                                                                                                                                                                   06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-NOV-2003
                                                                                                                                ADK69873;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
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The invention relates to a method for treatment of infection by alphaherpesviridae, beta-herpesviridae or gamma-herpesviridae involving administration of an arylnaphthalene compound. The method is used for treating infection by beta-herpesviridae (preferably herpesvirus 5, 6 7), gamma-herpesviridae (preferably herpesvirus 4 or 8) and alphaherpesviridae (preferably herpesvirus 1, 2 or 3). The arylnaphthalene compound inhibits virus growth. This sequence represents a phosphorothioate oligonucleotide used to treat herpesviridae infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Use of arylnaphthalene compound for treating infection by herpesvirus e.g. alpha herpesvirinae, beta herpesvirinae and gamma herpesvirinae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human heat shock protein 27 antisense oligonucleotide SEQ ID NO:2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            heat shock protein 27; hsp27; cytostatic; gene therapy; heat shock protein 27 inhibitor; hsp27 inhibitor; cancer; human; antisense oligonucleotide; ss.
                                                                                Alpha-herpesviridae; beta-herpesviridae; gamma-herpesviridae; arylnaphthalene; herpesvirus; virus growth inhibition; phosphorothioate oligonucleotide; virucide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.9%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kuo Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chang S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure, Page 3; 10pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           130 CGGATGAAGAAGATCAAACG 149
Phosphorothicate oligonuclectide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21 CGCAAGAGAGAGAGGG 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-MAY-2003; 2003US-00445268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-MAY-2002; 2002US-0382692P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADM94652 standard; DNA; 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-256788/24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
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HSIEH H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JUAN L.
CHANG S.
                                                                                                                                                                                                                                                                                                                                                                     US2004044069-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KUO Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                          Unidentified
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(JUAN/)
(CHAN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (KUOY/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hsu T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (/INSH]
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ADM94652
ID ADM8
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AC ADM8
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DT O1-i
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The present invention describes a composition which comprises a therapeutic agent that reduces the amount of active heat shock protein 27 (hps27) in hsp27 expressing cells exposed to the therapeutic agent. The composition has cytostatic activity, and can be used in gene therapy. The composition is useful in treating cancer, e.g., prostate, bladder, lung, breast, pancreatic, colon, skin (for example melanoma), renal or ovarian cancer or a central nervous system malignancy. The present sequence represents a human hsp27 antisense oligonucleotide which is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                               New composition comprising a therapeutic agent that reduces the amount of active hsp27 in hsp27 expressing cells exposed to the therapeutic agent, useful in treating cancer, e.g., prostate cancer or a central nervous system malignancy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Formulation useful for treating, controlling or preventing prion disease or for prophylactic treatment of cancer caused by oncoviruses, comprises an antiviral oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene therapy; antiviral oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3;
                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21 BP; 2 A; 6 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       prion disease; cancer; oncovirus; ss.
                                                                                                       Signaevsky M;
                                                                                                                                                                                                                                             Claim 5; SEQ ID NO 2; 38pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1020 GCTCAAGCTGGCTGACTTTG 1039
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                         (UYBR-) UNIV BRITISH COLUMBIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-SEP-2002; 2002US-0410264P. 05-DEC-2002; 2002US-0430934P.
                            02-OCT-2002; 2002US-0415859P.
18-APR-2003; 2003US-0463952P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-SEP-2003; 2003WO-IB004573
02-OCT-2003; 2003WO-CA001588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21mer antisense against CMV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADO20547 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Juteau J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytostatic;
                                                                                                       Rocchi P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (REPL-) REPLICOR INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2004-270045/25.
                                                                                                                                    WPI; 2004-316331/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
es 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2004024919-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cytomegalovirus.
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                                                                                                         Gleave ME,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Virucide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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The invention relates to an antiviral oligonuclectide formulation

comprising an antiviral oligonuclectide, where the antiviral activity of

the oligonuclectide occurs principally by a non-sequence complementary

mode of action. Further disclosed is a kit comprising at least one

antiviral oligonuclectide or antiviral oligonuclectide formulation in a

labelled package, where the label on the package indicates that the

antiviral oligonuclectide can be used against at least one virus, and a

method for the prophylactic treatment of cancer caused by oncoviruses in

human or non-human animal. The formulations and antiviral pharmaceutical

composition are useful in the treatment, control, or prevention of a

composition are useful in the treatment of cancer caused by oncoviruses in

a human or a non-human animal, or viral infections. The current sequence

represents an oligonuclectide used in an example from the invention.
Example 1; Page 103; 161pp; English.
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Sequence 21 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 0 Other;

0 0.9%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 6e+02; Live 0; Mismatches 3; Indels 130 CGGATGAAGAAGATCAAACG 149 Query Match Best Local Similarity 85.0% qq ð

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21 CGCAAGAAGAAGAACG 2

ADQ58895; RESULT 479 ADQ58895/

Yin yang-1 (YY-1) associated primer #3. ADQ58895 standard; DNA; 21 BP (first entry) 23-SEP-2004 

antidiabetic; immunosuppressive; cytostatic; Yin Yang-1; transcription factor; type I diabetes; transgenic; diabetes; multifunctional transcription factor; type 2 diabetes; autoimmune disease; cancer; mineral metabolism disoader; lipid metabolism disoader;

Rattus norvegicus.

WO2004056857-A2.

08-JUL-2004.

19-DEC-2003; 2003WO-EP014762.

20-DEC-2002; 2002DE-01061650.

(UYGR ) UNIV GREIFSWALD.

Kloeting N; Kloeting I,

WPI; 2004-507695/48.

New variant of the Yin Yang-1 transcription factor, useful for treating e.g. diabetes and autoimmune disease, also for diagnosing predisposition and in screening for therapeutic agents.

Disclosure, Fig 11, 193pp, German.

The invention describes a protein variant of the Yin Yang-1 transcription factor (I), having a 411 amino acid (aa) sequence (4) reproduced. Also described are: protein (Ia) that is a homologue of (4) and includes Arg a position 303 and Lys at position 31; peptide (II) that is a fragment of (I) or (Ia) and includes the positions 303 and 311 of (4); nucleic acid (II) that encodes (I), (Ia) or (II); an antibody (Ab) directed against (I) or (Ia); methods for determining a tendency to develop type 1

The sequences given in AAQ43226-32 are primers which were used in the cloning of DNA encoding the variable (V) regions of the murine antimuman IL-2 receptor monoclonal Ab (MAb) B-B10. This MAb was used in the construction of a humanised antibody (Ab) which binds specifically to human interleukin (IL)-2 receptor (AIL2R). The complementarity-determining regions (CDRs) for the hIL2R MAb were derived from B-B10 (see

for IL-2 receptor useful for treating carcinoma expressing IL-2 receptor Humanised antibody comprising - CDR region of mouse MAB B-B10 specific

Disclosure; Page 44; 62pp; English.

Noguchi H;

Wijdenes J,

Nakatani T, Gomi H, WPI; 1993-197057/24.

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diabetes, transgenic non-human mammal (A) in which the germ and somatic cells contain a nucleic acid (or segment) encoding a 411 as sequence (2), or sequences with at least 95, best 93k homology, where the homologue includes 303Met and 311Arg; and use of (A) to screen for compounds (B) that are protective against diabetes. The methods are useful for factor. (I), or its homologues and peptides, also nucleic acids encoding them and antisense oligonucleotides, are useful for treatment of type 1 and 2 diabetes, autoimmune diseases, cancer and disorders of mineral and lipid metabolism. Detecting mutations in the human analogue of (4) is used to determine a predisposition for these diseases. Transgenic animals that contain the sequence encoding (4), or its homologues, are used to primer associated with the isolation and analysis of yin yang-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Complementarity-determining region; CDR; humanised; antibody; hILL2R; human; interleukin; IL-2; receptor; murine; anti-human; Ab; T-cell; monoclonal antibody; B-B10; mixed lymphocyte reaction; variable; V; region; PCR; framework; plasmid; heavy; H; light; L; amplify; primer;
                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                   Score 15.2; DB 1; Length 21;
Pred. No. 6e+02;
0; Mismatches 3; Indels
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                                                                                                                                                                                                                                         Sequence 21 BP; 0 A; 11 C; 1 G; 9 T; 0 U; 0 Other;
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85.0%; Pred
0; ?
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B-B10 V region primer VHback #1.
                                                                                                                                                                                                                                                                                                                                                        20 AGGAAGGCAGAGGAAG 1
                                                                                                                                                                                                                                                                                                                            24 AGGAATGCAGAGGTAGGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         polymerase chain reaction; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (revised)
                                                                                                                                                                                                            transcription factor.
                                                                                                                                                                                                                                                                                  Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ43226;
                                                                                                                                                                                                                                                                    Query Match
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AAT98198,
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                                                                                                                                                                   ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "2'-0-[hexyl-N-(3-oxycarbonyl-cholesteryl)amino]-uridine or may be 5'-0-dimethoxytrityl-2'-0- [hexyl-N-(5-thiocarbonyl-3,6-dipivolyl fluorescein)amino]uridine"
also AAR37599-04). The hIL2R MAb is antagonistic to the binding of IL-2 to the IL-2 receptor on human T-cells. It also inhibits the human mixed lymphocyte reaction. The cDNA encoding the variable (V) region of the B-BIO Abw was cloned by PCR and sequenced (see also AQ43133-36) A human Abwith high levels of amino acid sequence homology to the murine sequence was selected and the framework of this Ab was bound with the B-BIO V region CDR and a part of the framework to design several kinds of the humanised B-BIO V region. The DNA sequence coding this humanised B-BIO was synthesised and a plasmid expressing humanised B-BIO was constructed. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New amine-derivatised nucleoside(s) and oligo:nucleoside(s) - useful as diagnostics, therapeutics and research reagents, partic. in anti-sense
                                                                                                                                                                                                                                                                                                                                                           Alkylamino group; ribofuranosyl sugar; antisense therapy; virus; HIV; herpes; papilloma; antiviral; ss.
                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "contains phosphorothioate linkages between
                                                                                                                                                                   .
0
                                                                                                                                              0.9%; Score 15.2; DB 1; Length 22; 85.0%; Pred. No. 6.3e+02;
                                                                                                                                                                    3; Indels
                                                                                                                         Sequence 22 BP; 7 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                              Anti-CMV 2'-0-alkylamino-containing oligomer #70.
                                                                                                                                                                    0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                          140 AGATCAAACGGCAGCTGTCA 159
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                                                                                                                                                                                                         AGGTCAAACTGCAGCAGTCA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER
                                                                                                                                                                                                                                                                     BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleosides"
                                                                                                                                                                                                                                                                     AAQ85817 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    base=
                                                                                                                                                                                                                                                                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                              *tag= b
                                                                                                                                                                     17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Manoharan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mod
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                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9506659-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                    misc feature
                                                                                                                                                                                                                                                                                                              25-MAR-2003
07-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-MAR-1995
                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                           AAQ85817;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cook PD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 therapy
                                                                                                                                                                       Matches
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cytomegalovirus (CMV) sequence. The modified nucleosides may increase the half-life of the oligomers in cell extract assays for the inhibition of specific target sequences. The modified oligomer is an example of a compound (see AAQ85799-Q85839 for other examples) e.g. a nucleoside or oligonucleoside, which contains a ribofuranosyl sugar portion and a base portion, such that at least one of the nucleoside contains at a 2'-0', 3'-0-0 or 5'-0-position, a substitution (see AAQ85799 for details of the substitutions). The compounds are useful in diagnostics, therapeutics and as research reagents particularly in antisense therapy for killing cells and viruses such as HIV, herpes or papilloma viruses. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This oligonuclectide was used to generate a fusion protein in which the sea firefly (Vargula sp.) luciferase is linked to an epidermal growth factor receptor, via a mouse immunoglobulin (1g) constant heavy domain 4 (CH4) chain. This oligonuclectide was used to construct the CH4 linker. This is an example of a method of detectably labelling cells by fusing a secretory-type luminescent enzyme with a cell membrane protein and expressing the fusion protein on the cell membrane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sea firefly, Vargula; luciferase; label; mouse; immunoglobulin; murine; constant heavy domain; epidermal growth factor receptor; fusion protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A method of labelling cells - comprising a luminescent protein fused to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.9%; Score 15.2; DB 1; Length 22; 35.0%; Pred. No. 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 22 BP; 0 A; 6 C; 5 G; 10 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 22 BP; 8 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide for murine Ig CH4 domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1726 GITCACCIGCCCACTIGICC 1745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 3; Page 3; 9pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGCAAGAGAGAGCAAACG 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP
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Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 85.0%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT98198 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         luminescent enzyme; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (TORA ) TORAY IND INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-AUG-1995;
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Nucleic acids encoding polypeptides, designated NOVX polypeptides, useful for treating a syndrome associated with a NOVX-associated disorder, e.g. cell proliferation (e.g. cancer and diabetic retinopathy), angiogenic or
                                                                                                                                                            Human; NOV2; ss; fertility disorder; spermatogenesis; cardiant; cytostatic; immunomodulatory; antiproliferative; antidiabetic; cell proliferation; cancer; diabetic retinopathy; angiogenic disorder; pulmonary disorder; hematopoietic disorder; immunological disorder; inflammatory disorder; tumour related disorders; emphysema; cirrhosis; wound healing; gene therapy; RTQ PCR primer; Real-time quantitative PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to nucleic acids encoding NOVX (X being an integer from 1-8) polypeptides. The NOVX nucleic acids and polypeptides are useful in diagnosing, treating or manufacturing a medicament for a disease or disorder associated with NOVX e.g. cell proliferation (cancer and diabetic retinopathy), angiogenic or pulmonary disorders, fertility disorders (e.g of spermatogenesis), haematopoietic, immunological, inflammatory and tumour related disorders, emphysema, cirrhosis, wound healing. NOVX nucleic acids are also useful in gene therapy. They are also used for screening for a modulator of activity or of latency or predisposition to a NOVX-associated disorder. They are also useful for determining the presence of or predisposition to a NOVX-associated disorder. The present sequence is an RTO PCR primer (real-time quantitative PCR) for amplifying nucleic acids encoding human NOV2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Taillon BE, Spaderna SK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 22 BP; 6 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1; Page 120; 144pp; English.
                                                                                                                            Human NOV2 RTQ PCR forward primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000US-0175434P.
2000US-0175488P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-0175696P.
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2000US-0175819P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-AUG-2000; 2000US-0223524P
04-JAN-2001; 2001US-00755665
               AAS10876 standard; DNA; 22
                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Majumder K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CURA-) CURAGEN CORP.
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                                                                                                                                                                                                                                                                                           sapiens.
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13-JAN-2000;
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                                                                                        24-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SK,
                                                                                                                                                                                                                                                                                                                                                                                  12-JUL-2001
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                                                                                                                                                                                                                                                                                                          Synthetic
                                                    AAS10876;
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AAS10876/
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Spytek KA;

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polypeptides and polymocleotides. The GPCR polypeptide, GPCR mucleic acid and antibody are useful for treating, preventing or alleviating a GPCR-and antibody are useful for treating, preventing or alleviating a GPCR-human. In particular, the disorder is cardiomyopathy, atheroaclerosis, diabetes, or a disorder related to cell signal processing and metabolic pathway modulation. The GPCR polypeptide and nucleic acid are also useful for diagnosing the presence of or predisposition to a disease associated with altered levels of GPCR, particularly cancer. The GPCR nucleic acid and polypeptide are especially useful in therapeutic or prophylactic applications for disorders associated with abernath GPCR expression or activity. The DNA encoding the protein is useful in gene therapy for treating the above conditions. Furthermore, the nucleic acids and
                                                                                                                                                                                                                                                                                                                                                                                          Human, G-protein coupled receptor, GPCR, cardiomyopathy, atherosclerosis, diabetes; cell signal processing; metabolic pathway modulation; cancer; adenocarcionma; pryphoma; prostate cancer; uterus cancer; asthma; immune response; neurodegenerative disorder; inflammatory disorder; crohn's disease; multiple sclerosis; Albright hereditary osteodystrophy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Malyankar UM, Edinger S;
Macdougall JR, Gunther E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New G protein coupled receptor polypeptides and polynucleotides, useful in gene therapy, particularly for treating or preventing cardiomyopathy, atherosclerosis, diabetes, multiple sclerosis, Crohn's disease or cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to novel isolated G-protein coupled receptor (GPCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Spytek KA;
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                                                                                                                                                                                                                                                                                                                                     Human G-protein coupled receptor, reverse primer #73.
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Shenoy SG, Gusev V,
Stone DJ, Sciore P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Millet
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22 ATCTTCAGAGAGGATGCCAT
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2001US-0259743P.
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2001US-0267464P.
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2001US-0275946P.
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2001US-0284591P
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2001US-0299327P.
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                                                                                                                                                      ABS59071 standard; DNA; 22
                                                                                                                                                                                                                                                                         (first entry)
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Ellerman K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (CURA-) CURAGEN CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                primer; PCR; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
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19-JUN-2001;
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04-JAN-2001;
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0.9%; Score 15.2; DB 1; Length 22; 85.0%; Pred. No. 6.3e+02; Live 0; Mismatches 3; Indels

an integer

Local Similarity 85.0 tes 17; Conservative

Matches

Query Match

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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, anti-HIV; cytostatic; antidiabetic; antiasthmatic; cachexia; AIDS; antiinflammatory; cardiant; haemostatic; neuroprotective; anorectic; notropic; immunosuppressive; osteopathic; antiparkinsonian; cancer; antiinfertility; cerebroprotective; gene therapy; NOVX; NOV; fertility; metabolic disorder; diabetes; obesity; infectious disease; anorexia; neurodegenerative disease; Alzheimer's disease; Parkinson's disease; immune disorder; haematopoietic disorder; cardiovascular disorder; bronchial asthma; dyslipidemia; metabolic disturbance; neurogenesis; pCR; metabolic syndrome X; wasting disorder; cell differentiation; primer; cell proliferation; haematopoiesis; wound healing; angiogenesis; ss.
polypeptides are useful in treating adenocarcinoma, lymphoma, prostate cancer, uterus cancer, immune response, neurodegenerative disorders, asthma, inflammatory disorders, Crohn's disease, multiple sclerosis or Albright hereditary osteodystrophy. These are also useful in developing a powerful assay system for functional analysis of various human disorders, as well as in diagnostic applications. ABSSB47-ABSS521 represent human GPCR coding sequences, primers and probes of the invention
                                                                                                                                                                                        Gaps
                                                                                                                                                                                         0;
                                                                                                                                                       0.9%; Score 15.2; DB 1; Length 22;
85.0%; Pred. No. 6.3e+02;
live 0; Mismatches 3; Indels
                                                                                                                            Sequence 22 BP; 10 A; 3 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Human NOV31 reverse PCR primer Ag3530.
                                                                                                                                                                                                                       TGTTCCTGTTCCAGCTGCTC 936
                                                                                                                                                                                                                                           2001US-0276776P.
2001US-0276994P.
2001US-0277239P.
2001US-0277321P.
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2001US-0279344P.
2001US-0279995P.
2001US-0280233P.
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20-WAR-2001; 2001US-0277338P.
21-WAR-2001; 2001US-027791P.
22-WAR-2001; 2001US-027838P.
23-WAR-2001; 2001US-027835P.
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2001US-0274849P.
2001US-0275235P.
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2001US-0275601P.
2001US-0276000P.
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2001US-0278152P.
2001US-0278894P.
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                                                                                                                                                                                                                                                                                                                                   ABV99538 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                          Local Similarity 85.0
les 17; Conservative
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08-MAR-2001; 2

08-MAR-2001; 2

09-MAR-2001; 2

13-MAR-2001; 2

13-MAR-2001; 2

14-MAR-2001; 2

14-MAR-2001; 2

16-MAR-2001; 2

19-MAR-2001; 2

20-MAR-2001; 2
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30-MAR-2001;
30-MAR-2001;
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2001US - 0294485P
2001US - 029489P
2001US - 0299027P
2001US - 029903P
2001US - 029310P
2001US - 0309198P
2001US - 0309198P
2001US - 0318462P
                                                                                                                                                                                                                                                                                   2001US-0318770P.
2001US-0325430P.
2001US-033561P.
2001US-0335301P.
2001US-0332301P.
2001US-0332271P.
2001US-0332272P.
2001US-033204P.
2001US-033204P.
2001US-0280822P.
2001US-0280900P.
2001US-0281494P.
2001US-0283675P.
2001US-0287424P.
2001US-028966F.
2001US-028966P.
                                                                                                           2001US-0291190P.
2001US-0291099P.
2001US-0291240P.
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                                                        30-APR-2001;
                                                                                   03-MAY-2001;
03-MAY-2001;
                                                                                                             15-MAY-2001;
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                                                                                                                          16-MAY-2001;
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## (CURA-) CURAGEN CORP.

Rastelli L, Mezes PD, Smithson G, Guo X, Gerlach V, Casman SJ; Boldog FL, Li L, Zerhusen BD, Tchernev VT, Gangolli EA, Vernet CAM; Pena CEA, Burgess CE, Liu X, Spytek KA, Gorman L, Spadenna SK; Voss EZ, Malyankar UM, Anderson DW, Patturajan M, Miller CE; Taupier RJ, Padigaru M, Shenoy SG, Kekuda R, Gusev VY, Pochart PF; Zhong M;

## WPI; 2002-732824/79.

New NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders e.g. diabetes, cancer, Alzheimer's disease, dyslipidemias, obesity, immune or hematopoietic disorders, and asthma.

## Example C; Page 505; 619pp; English.

The present invention relates to new isolated proteins (NOVX) and their coding sequences (ABV99327-ABV99595 and ABP70049-ABP70149), where X is any number from 1 to 48. The NOVX proteins and coding sequences are useful in the manufacture of andicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. The NOVX coding sequences and proteins are useful for treating, preventing or disgnosing diseases uncreased and proteins are useful for treating, observe, infectious diseases, anorexia cancers, disease, preferably a nover-associated cachexia, cancer, neurodegenerative diseases, Alzheimer's disease, Parkinson's disease, immune disorders, haematopoietic disorders, cardiovascular disorders, fertility, bronchial asthma, AlDS, dyslipidemia, metabolic disturbances associated with obesity, metabolic syndrome X or wasting disorders associated with obesity, metabolic syndrome X or wasting disorders associated with mirror diseases or various cancers. The NOVX coding sequences and proteins may also be used as targets for the identification of small molecules that modulate or inhibit e.g.

8X8688

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RESULT 488
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an agent for modifying the C-terminal of a protein comprising an acceptor region with a group capable of binding to a protein through a transpeptidation reaction in a protein translation system, and a modifying region containing a non-radioactive modifier linked to a part of the acceptor region via a nucleotide linker. The modified proteins are useful for detecting protein interaction in functional analysis of genes e.g. in genome projects, as well as protein-nucleic acid interaction in large quantities in high-throughput screening when studying biological molecules such as proteins and nucleic acids in
wound healing and angiogenesis, in gene therapy, in generation of antibodies that bind immunospecifically to NOVX substances for use in therapeutic or diagnostic methods. The present sequence is a PCR primer, which was used in an example from the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Production of C-terminal modified proteins with nucleotide-linker containing modifying agents and translation templates, useful for detecting protein interaction in functional analysis of genes e.g. in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C-terminal modified protein; protein interaction detection; proteome analysis; protein-nucleic acid interaction; PCR; primer; ss.
                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        genome function or protecome analysis. The modified proteins can be conveniently and quickly applied in studying protein interactions, wi improved efficiency. ABK95189-ABK95225 represent PCR primers used in
                                                                                                                                                                             ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR primer containing part of c-jun and 6 repeated His-tags.
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                                                                                                                                    ch 0.9%; Score 15.2; DB 1; Length 22; l Similarity 85.0%; Pred. No. 6.3e+02; 17; Conservative 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 22 BP; 0 A; 1 C; 13 G; 8 T; 0 U; 0 Other;
                                                                                               Sequence 22 BP; 2 A; 6 C; 5 G; 9 T; 0 U; 0 Other;
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                                                                                                                                                                                                                  1531 CTACAAAGGAGGCCAGCCT 1550
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                                                                                                                                                                                                                                           CTACAAAACGAGGACAGACT 3
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                                                                                                                                                                                                                                                                                                                                                             ABK95214 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Doi N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-500446/53
                                                                                                                                                           Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                ABK95214;
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Matches
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Modulating the expression of a nucleic acid in the hepatic system, useful
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention relates to a novel method of modulating the expression of a nucleic acid in the hepatic system of a mammal which comprises administering to the mammal an oligonucleotide that hybridises to the nucleic acid to modulate the expression of the nucleic acid, where the oligonucleotide has two sterol groups that are covalently bonded. The invention may be useful for the development of a compound with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hepatotropic activity whilst the genetic sequences of the invention may prove useful for gene therapy. The methods are useful for treating hepatic disease or disorder associated with a protein encoded by a gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Note: These oligonucleotides may have one or more of several modifications which are detailed in the specification, including having
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                 expression modulation, hepatic system; sterol group; hepatotropic; gene therapy; bepatic disease; antisense therapy; ss.
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85.0%; Pred. No. 6.3e+02;
ative 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 7; SEQ ID NO 19; 98pp; English.
                                                                                                                                                                                    CMV antisense oligonucleotide SegID19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bennett FC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                130 CGGATGAAGAAGATCAAACG 149
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   22
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ADF77702 standard; DNA; 22
                                                                                                                       (first entry)
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nes 17; Conservative
ADF70306 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-679947/64.
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                                                                                                                                                                                                                                                                                                                                               Cytomegalovirus
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                                                             ADF70306;
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ID ADE7
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AC ADE7
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DT 26-FI
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Gaps

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Matches

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enzyme gene and a gene encoding the ligninase so ligated that the gene can transcribe; preparing a host cell with the vector; and culturing such host cells. The promoter sequence of the cellulose-decomposing enzyme gene is particularly the promoter sequence of the callobiose endoyloranase I gene or beta-glucosidase gene. The DNA fragment for the rangolucanase I gene or beta-glucosidase gene. The DNA fragment for the lighthnase in basidiomycetous host is applicable in production of recombinant lightinase in host-vector system for use in processing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to a method for producing a ligninase comprising the construction of a vector from a recombinant DNA containing a DNA with a promoter sequence of a Basidiomycetes-derived cellulose-decomposing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       woodchips and pulp. This sequence corresponds to a primer to PCR amplify the genes and promoter fragments of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ss; PCR; primer; real time quantitative PCR; human; antidiabetic; anorectic; cardiant; hypotensive; antiarteriosclerotic; anorectic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; osteopathic; antiarthritic; antinflammatory; dermatological; antiasthmatic; antilipaemic; gene therapy; fibroblast growth factor receptor 4; FGFR4; complement factor I precursor; matrix metalloproteinase-15 precursor;
              ss; primer; ligninase; Basidiomycetes; cellulose-decomposing enzyme; promoter; cellobiose dehydrogenase; cellobiohydrolase I; cellobiohydrolase II; endoglucanase I; beta-glucosidase; woodchip; pulp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA fragment having promoter activity for highly producing ligninase in basidiomycetous host, applicable in production of recombinant ligninase in host-vector system for use in processing woodchips and pulp.
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85.0%; Pred. No. 6.3e+02;
tive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                   Kabuto M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      108 GCCCCCGCCGATCGCCATGG 127
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2002JP-00251720.
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29-AUG-2002; 2002JP-00252055
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                                                                                                                                                                                                                                                                                                                                                                            (OJIP ) OJI PAPER CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-902701/82.
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                                                                                                 Frametes hirsuta
                                                                                                                                      WO2003070939-A1.
                                                                                                                                                                                                                                                          25-FEB-2002;
                                                                                                                                                                                                                                                                                                 29-AUG-2002;
                                                                                                                                                                                                                                                                             16-JUL-2002;
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                                                                                                                                                                           28-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local
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alpha-2 macroglobulin-like polypeptide variant;
antileukoproteinase 1 precursor; LIV-1; nuclear hormone receptor NOR-1;
transmembrane protein-like; beta-neoendorphin-dynorphin precursor.
surface antigen Ly-9 precursor;
     growth factor-21; FGF-21;
                                                                                 2002US-0409544P.
2002US-0410320P.
2002US-0411060P.
2002US-0412766P.
2002US-041285F.
2002US-0413342P.
                                                                 09-SEP-2003; 2003WO-US028141
                                                                                                                        30-SEP-2002; 2002US-0414832P
                                                                                                                                   CURAGEN CORP.
                                            WO2004022723-A2
                                 Homo sapiens.
                                                                                        12-SEP-2002;
                                                                                            16-SEP-2002;
                                                                                                       23-SEP-2002;
                                                                                                             24-SEP-2002;
                                                                                                                   SEP-2002;
                                                                                  10-SEP-2002;
                                                       18-MAR-2004
     fibroblast
                                                                                                                                   (CURA-)
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Rieger DK; Padigaru M, Ort I, Guo X, Anderson DW, WPI; 2004-315567/29. Zhong M,

New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections

Example 12; SEQ ID NO 146; 214pp; English.

The invention relates to a novel isolated polypeptide (NOVX) comprising a mature form of any of the 37 amino acid sequences fully defined in the specification. A polypeptide of the invention has antidiabetic, anorectic, cardiant, hypotensive, antiarteriosclerctic, anorectic, or increase, antiparkinsonia, antianconvulsant, osteopathic, antialiflammatory, dermatological, antiaschmatic, and antialiflammatory, dermatological, antiaschmatic, and antialiflammatory, dermatological, antiaschmatic, and antialiflammatory, dermatological, antiaschmatic, and antiabodies are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such as metabolic disorders, diabetes, obesity, infectious diseases such as metabolic disorders, diabetes, obesity, infectious diseases (viral, bacterial, fungal, belminthic, and protozoal), anorexia, cancer, cardiovascular diseases (hypertension, atherosclerosis), neurodegenerative disorders Alzheimer's disease, Parkinson's disease, epilepsy, immune disorders and polypeptides are useful may also be used as targets for the identification of small molecules that may also be used as targets for the identification of small molecules that may also be used as targets for the identification of small molecules that may also be used inhibit e.g. neurogenesis, cell differentiation, cell proliferation of antibodies that bind immunospecifically to NOVX substance for use in harbarious desirion probes in chromosome manning and entition and entition may inchromes for the propertice in the propertion of antibodies that bind immunospecifically to NOVX substances for the definition of antibodies that bind immunospecifically to probe side the propertice or inhibition of antibodies in the immunospecifically to chromosome manning and propertices in the propertice or inhibition of antibodies in the independent of the properti Ly-9 progressor, NOVGe-6m show homology to fibroblast growth factor-21 Ly-9 progressor, NOVGe-6m show homology to alpha-2 macroglobulin-like polypeptide variant; NOVGe-8g show homology to antileukoproteinase 1 precursor; NOV9a-9; show homology to LIV-1 protein; NOV10a shows homology to nuclear hormone receptor NOR-1; NOV11a-11; show homology to acids are further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The NOVX polypeptides of the invention show homology to certain known human proteins: NOV1a-1t show homology to fibroblast growth factor receptor 4 (FGRRA); NOV2a shows homology to complement factor I precursor; NOV3a shows homology to matrix metalloproteinase-15 precursor; NOV4a shows homology to MDC3; NOV5a-5c show homology to T-1ymphocyte surface antigen

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The invention relates to identifying a compound comprising exposing cell expressing gene 1 having enhancing or suppression effect on an APPL-SV Denotype (a transgenic fruit fly expression the Amyloid precursor-like protein, APP, as a fusion protein with the suppressor of hairless transcription factor, Su(H) and V916 activation domain. The fusion correctly fruit fly and v916 activation domain. The fusion correctly suppression flow being to release the Su(H-VP16, which affects wing vein development. Genes affecting Psn expression/activity were screened by crossing the APP-SV correctly being the nEP P-element insertion library, and the DNA recovered from the appropriate EP strain and sequenced) chosen from AD000864, contain the identified fruit fly genes affecting APP processing and their mammalian homologues, identifying modulation of Alzheimer's disease (AD) correction, regulation of biological pathway, gene expression or protein clunction associated with AD relative to cell in absence of agent. Also included are regulating AD (involves providing a subject with AD or correctly and an an agent that changes the expression of a gene certained above or changes the activity of a polypeptide having a sequence chosen from AD00085-AD001066, and treating the subject with the agent) cand a composition (comprising a nucleic acid encoding a polypeptide
-dynorphin precursor. The present sequence represents a PCR primer used in the exemplification of the invention.
                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying compound by exposing cell that expresses gene having enhancing or suppression effect on APPL-SV phenotype to agent, identifying modulation of Alzheimer's disease (AD), regulation of gene or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fruit fly; ss; PCR; Alzheimer's disease; Gamma secretase; Psn gene; P-element; EP; APPL-SV; Amyloid precursor-like protein; APP; suppressor of hairless transcription factor; Su(H); VP16 activation domain; dementia; memory loss; language deterioration;
                                                                                                                                                                   Gaps
                                                                                                                                                                   .
0
                                                                                                                             Length 22;
                                                                                                                                                                 3; Indels
                                                                                   Sequence 22 BP; 9 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Drosophila P-element, EP, inverse PCR primer 5F3.
                                                                                                                           Score 15.2; DB 1;
Pred. No. 6.3e+02;
                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; SEQ ID NO 210; 185pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          impaired visuospatial skill; primer.
                                                                                                                                                                                                       836 TIGICITIGAGIACCIGGAC 855
                                                                                                                                                                                                                                  21 TIGICITIGAGCATCTIGAC 2
                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-OCT-2002; 2002US-00263929.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-OCT-2002; 2002US-00263929.
                                                                                                                           0.98;
                                                                                                                                            85.0%;
                                                                                                                                                                                                                                                                                                                                                 ADO01072 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein expression with AD.
                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                     Query Match 0.99
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (LIFE-) LIFE SCI DEV CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Drosophila melanogaster.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-355296/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Galant R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2004067535-A1
                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                       ADC01072;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kim J,
                                                                                                                                                                                                                                                                                                         490
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    82666
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detailed above or an expression vector comprising the nucleic acid or a host cell comprising the expression vector or an antisense coligonucleotide that hybridises under stringent conditions to the nucleic acid or polypeptide or an antibody that specifically binds to the polypeptide). The method is useful for identifying compounds modulating symptom of Alzheimer's disease (AD), regulation of biological pathway associated with AD, or regulation of gene expression or protein function of gene or protein associated with AD. The nucleic acids and proteins are useful in acreaning and useful in screening and treating the subject having increased susceptibility to AD or symptoms of AD such as dementia, memory loss, language deterioration and impaired visuospatial stills. The
                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a method of identifying compounds that influence fat cell number or size comprising providing a cell that expresses a gene and an agent, exposing the cell to the agent and identifying fat cell number or size relative to cells not exposed to the agent. The method also comprises providing an expression vector and an agent, exposing the vector to the agent, detecting a change in expression of the gene relative to expression of the gene in an expression vector not exposed to the agent, treating a subject with the agent and identifying fat cell number or size in the subject. The agent comprises an antisense oligonucleotide. The subject comprises a mammal, preferably a human. The method also comprises providing a polypeptide and an agent, exposing the polypeptide to the agent, detecting binding of the agent to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Identifying compounds that influence fat cell number or size for treating or preventing obesity or diabetes by exposing the cell to the agent and identifying fat cell number or size relative to cells not exposed to the
                                                                                                                                                                                                                                       a PCR primer used to amplify fruit fly DNA flanking
                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fly; PCR; ss; fat cell number; fat cell size; obesity; diabetes; anorectic; antidiabetic; primer.
                                                                                                                                                                                                                                                                                                                                                                                       ..
0
                                                                                                                                                                                                                                                                                                                                         0.9%; Score 15.2; DB 1; Length 22;
85.0%; Pred. No. 6.3e+02;
live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                  Sequence 22 BP; 9 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; SEQ ID NO 436; 275pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                            1522 GAGATTCAGCTACAAAAGGA 1541
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GAGATGCATCTACACAAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-OCT-2002; 2002US-00267502.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-OCT-2002; 2002US-00267502,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADO08110 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                     17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      primer #2.
                                                                                                                                                                                                                                                          an EP insertion site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (LIFE-) LIFE SCI DEV
                                                                                                                                                                                                                                       present sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-328526/30.
                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kim J, Galant R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2004071700-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUL-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fly DNA PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AD008110:
                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Diptera.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 491
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ID ADO0
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Sequence 22 BP; 0 A; 6 C; 5 G; 10 T; 1 U; 0 Other;

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The invention relates to a method of targeting an antisense oligonucleotide to hepatic tissues involving conjugating the oligonucleotide to a cholesteryl moiety and administering the conjugate. The method is useful for targeting an antisense oligonucleotide to hepatic tissues to modulate the expression of a gene in the liver. The oligonucleotide is useful in diagnostics, therapeutics, as research reagents and kits, in pharmaceutical composition and for treating diseases produced by undesired production of proteins. The method provides lipophilic oligonucleotide conjugates with improved biostability and altered biodistribution in mammals. The present sequence represents a modified oligonucleotide used for NMR analysis.
                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Targeting an antisense oligonucleotide to hepatic tissues to modulate the expression of a gene in the liver involves conjugating the oligonucleotide to a cholesteryl moiety and administering the conjugate.
polypeptide or a change in an activity of the polypeptide, treating a subject with the agent and identifying fat cell number or size in the subject. The agent comprises an antibody. A method of regulating fat cell number or size comprises providing a subject containing fat cells and an agent that changes the expression of a gene, and treating the subject with the agent under conditions so that fat cell size or number in the subject is altered. The method is useful for identifying compounds that influence fat cell number or size, for preparing a composition for treating or preventing obesity or diabetes. This sequence represents a PCR primer used to amplify fly DNA used in the scope of the invention.
                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ss, antisense, hepatic tissue targeting, liver gene expression, improved biostability, altered biodistribution, DNA-RNA hybrid.
                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                            0.9%; Score 15.2; DB 1; Length 22; 55.0%; Pred. No. 6.3e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modified oligonucleotide used for NMR analysis #6.
                                                                                                                                                                                                                                                      Sequence 22 BP; 9 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 7; SEQ ID NO 19; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bennett CF;
                                                                                                                                                                                                                                                                                                                                                                                        1522 GAGATTCAGCTACAAAAGGA 1541
                                                                                                                                                                                                                                                                                                                                                                                                                              GAGATGCATCTACACAAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADQ16470 standard; DNA; 22 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-APR-2000; 2000US-00546596.
                                                                                                                                                                                                                                                                                                                      82.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                        Best Local Similarity 85.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag=
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US6753423-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-SEP-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADQ16470;
                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc_RNA
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ID ADQ164
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8×35555555×8

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The present invention describes a method for detecting an analyte in a sample. The method comprises: (a) providing detection probes being to sample. The method comprises: (a) providing detection probes are capable of binding to the analyte; (b) providing a solid support; (c) providing capture probes being bound or capable of binding to the solid support; (d) concentrating the analyte on the solid support; (d) concentrating the analyte on the solid support; (d) concentrating the detection probes, the solid support and the capture probes; and (e) detecting probes, the solid support and the capture probes; and concentrating the detection probes where (i) the detection probes; and (e) detection probes not being bound to the analyte and thereby surplus detection probes not being bound to the analyte and thereby concentrating at least partially an emission of the first reporter of said support is labelled with a second reporter different from the first reporter; imaging the sample of at an emission wavelength of the second reporter and applying this mask to an image of the sample used for detecting the detection probes. The present sequence represents a capture
                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Detecting an analyte such as protein or nucleic acid, useful for screening drugs, comprises probe detection of captured analyte where surplus probe signal is quenched and/or differential emission wavelength
                                        Gaps
                                                                                                                                                                                                                                                                                                                                      analyte detection; detection; probe; detection probe; reporter;
                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    labelled with rhodamine-6G (Rh6G)"
 0.9%; Score 15.2; DB 1; Length 22;
85.0%; Pred. No. 6.3e+02;
rative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      χ.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gall
                                                                                                                                                                                                                                                                                                         C-fos mRNA detection capture oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jaeger S,
                                                                                                                                                                                                                                                                                                                                                              capture oligonucleotide; human; c-fos; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 20; 61pp; English.
                                                                             130 CGGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Droege S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mod_base= OTHER
/note= "5' labell
                                                                                                            cechaghaghaghaghage 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-JAN-2003; 2003US-0439439P
                                                                                                                                                                                                      ADQ31052 standard; DNA; 22
                                                                                                                                                                                                                                                                          23-SEP-2004 (first entry)
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                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lambrue D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (EVOT-) EVOTEC OAI AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-543305/52.
Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2004057023-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     modified base
                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hinnah S,
                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                         ADQ31052;
                                                                                                                                                                     RESULT 493
                                                                                                                                                                                                                                                                                                                                                                                                   Homo
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for haematopoietic cytokine receptor Zcytor1 cDNA.

(first entry)

22-MAY-1998

AAT94132;

23 ACNYTNTGGTAYMGNGCNCCNGA

BP.

AAT94132 standard; DNA; 23

RESULT 495 AAT94132/c

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Six Candida genes have been isolated, which encode an apparent CDC25 phosphatase (TYP1), a p13sucl homolog (CKS1), a cyclin dependent kinase (CDK-activating kinase catalytic subunit (CDK-1), and a Map kinase (CMK1) (AAT64446 to AAT64451). The TYP1 (MOC1), and a Map kinase (CMK1) (AAT64446 to AAT64451). The TYP1 polypeptide and nucleic acid is claimed, where TYP1 is at least 75% homologous to the amino acid sequence given in Seq 2, according to the claims of the specification. According to the disclosure, Seq 2 encodes CKS1 (AAT64446) and Seq 1 encodes TYP1 (AAT64447). The products may be used in reagents and assays which permit the rapid detection and evaluation of Candida yeast infections and for identifying cpds. Which have antifungal properties and which may be used as anti-mycotic agents. Such agents can be used therapeutically, as well as, for example, such agents in foodstuff, feed supplement for promoting weight gain in livestock, or in disinfectant formulations for treatment of non-living matter, e.g. for decontaminating hospital equiment and rooms
                                                                                                                                         0
      an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Candida cell-cycle regulatory proteins - used to develop prods. for the diagnosis, treatment and prevention of fungal infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYP1; CKS1; CDK1; CYB1; MOC1; CMK1; cell-cycle regulatory protein; Candida; anti-mycotic; antifungal; preservative; yeast; cyclin; kinase;
oligonucleotide used in the detection of c-fos mRNA, which is used in example from the present invention.
                                                                                                                                       Gaps
                                                                                                                                         ;
0
                                                                                              Query Match
0.9%; Score 15.2; DB 1; Length 22;
Best Local Similarity 85.0%; Pred. No. 6.3e+02;
Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 0.9%; Score 15.2; DB 1; Length 23; Best Local Similarity 60.9%; Pred. No. 6.5e+02; Matches 14; Conservative 3; Mismatches 6; Indels
                                                         Sequence 22 BP; 5 A; 4 C; 9 G; 4 T; 0 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 23 BP; 3 A; 5 C; 4 G; 3 T; 0 U; 8 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Draetta G;
                                                                                                                                                                            873 CCTGGATGACTGTGGGAACA 892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 3; Page 35; 70pp; English.
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                                                                                                                                                                                                                                                                                                                    AAT58215 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                   Candida CDK1 gene primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Damagnez V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MITO-) MITOTIX INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1997-043149/04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   phosphatase; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9639527-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                20-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cottarel G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                           AAT58215;
                                                                                                                                                                                                                                                                             RESULT 494
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                    Haematopoietic cytokine receptor - useful for ligand detection, and pathological condition diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
                                                                                                             Haematopoietic cytokine receptor; Zcytor1; ligand detection; cancer diagnosis; agonist; antagonist; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                     Grant FJ, Sprecher CA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 23 BP; 4 A; 5 C; 9 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 15.2; DB 1;
Pred. No. 6.5e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1294 TCCAACGAGGAGTTCAAGAC 1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 5; Page 65; 86pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCCACGAGCAGTTCAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ23767 standard; DNA; 23 BP.
                                                                                                                                                                                                                                                                           97WO-US008502.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%;
                                                                                                                                                                                                                                                                                                                                                                       Saumgartner JW, Foster DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-JAN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                       (ZYMO ) ZYMOGENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-018509/02.
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Best Local Similarity
                                                                                                                                                                                                                                                                         19-MAY-1997;
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                                                                                                                                                                                                          W09744455-A1
                                                                                                                                                                                                                                            27-NOV-1997.
                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               lymphomas
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Gaps

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1093 ACACTGTGGTACCGGCCCCTGA 1115

Sullivan D;

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Gaps

0;

Indels

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AAB23175), and to nucleic acids encoding them (AAA97448, AAA97449).
Germacrene A synthases plays a key role in the biosynthesis of sesquiterpene lactones, catalysing the formation of a germacrane biosynthetic precursor from farmesyl diphosphate (FDP). Sesquiterpene lactones are bitter-flavoured plant products which provide resistance against insects, nematodes, microorganisms and vertebrate herbivores, and are also involved in plant-plant interactions. Nucleic acids encoding chicory germacrene A synthases A and B are useful for the production of transgenic plants with modified sesquiterpenoid synthase activity.
                                                                                                                                                                       The present DNA sequence is the degenerate PCR primer-1, used to clone Candida cyclin dependent kinase, CDK1 gene. It is a cell cycle regulatory protein isolated from the genomic DNA of Candida albicans and was
                                                                            New Candida cyclin activated kinase 1, useful for generating vaccines and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chicory; short germacrene A synthase clone; germacrene A synthase A; sesquiterpene lactone biosynthesis; bitterness; pest resistance; insect; nematode; micro-organism; flavour compound; fragrance; phytoalexin; transgenic plant; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to two chicory germacrene A synthases (AAB23174,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel sesquiterpenoid synthase genes useful for reducing bitterness a increasing resistance against insects, nematodes, microorganisms and vertebrate herbivores in plants.
                                                                                                                                                                                                                                                                                                                   DB 1; Length 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chicory germacrene A synthase A PCR primer, SEQ ID NO:11.
                                                                                                                                                                                                                                                                            Sequence 23 BP; 3 A; 5 C; 4 G; 3 T; 0 U; 8 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RES INST AGROBIOLOGY & SOIL FERTI.
Rudolph J,
                                                                                                                                                                                                                                                                                                                 0.9%; Score 15.2; DB 1; 60.9%; Pred. No. 6.5e+02; rative 3; Mismatches 6
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                                                                                                                                                                                                                                                                                                                                                                                               1093 ACACTGTGGTACCGGCCCCTGA 1115
Damagnez V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             De Kraker
                                                                                                                                        Example 3; Page 58; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                      || :| |||||::| || || || ACNYTNTGGTAYMGNGCNCCNGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 3; Page 33; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                screening for its inhibitors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-MAR-2000; 2000WO-EP002130
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                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA97452 standard; DNA;
  Cottarel G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-638203/61.
                                       WPI; 2000-038847/03
                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                         amplified using PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cichorium intybus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200055338-A1.
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  Berlin V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAA97452;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes a novel method for generating an antisense library targeted to a selected RNA transcript. The methods can be used for identifying antisense agents and for identifying target sites for antisense-mediated inhibition of a selected gene. The use of a direct library for target site selection significantly simplifies the screening process, since only very small libraries need be prepared and assayed. AAZ23765-Z23767 represent multiple cloning site DNA regions used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                         Production of antisense libraries, used for identifying antisense agents and for identifying target sites for antisense-mediated inhibition of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cell cycle regulatory protein; CDK1 gene; cyclin dependent kinase;
Candida; isolate; clone; degenerate primer; genomic DNA; amplify; ss.
                                           DNA library; identification; multiple cloning site; MCS;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 15.2; DB 1; Length 23; Pred. No. 6.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 23 BP; 8 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
    Cloning vector multiple cloning site 3 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               364 GAGAGTGACCAGGCTTCAGC 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23
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                                                                                                                                                                                                                                                                                                                                                              Chen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.9%;
85.0%;
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98US-0107504P.
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                                                                                                                                                                                                                                                                                                                     (UTAH ) UNIV UTAH RES FOUND.
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                                                                                                                                                                                                                                                                                                                                                              Pierce ML,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      method of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-610866/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 17; Conserv
                                                             inhibition; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  selected gene.
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06-NOV-1998;
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                                                                                                                                                                                   07-0CT-1999
                                           Antisense;
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                                                                                                       Synthetic.
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Reduction of germacrene A synthase expression (e.g., via the use of antisense sequences) can be used to reduce bitter flavours in crops, thus increasing their commercial value. Increased germacrene A synthase expression may be used to obtain increased insect, nematode or microorganism resistance in plants, to obtain increased formation of sesquiterpene lactones with desirable properties (e.g., medicinal properties), and to obtain increased formation of germacrene A-derived flavour and fragrance compounds or phytoalexins. Sequences AAA97452-A97453 represent PCR primers used in an exemplification of the invention control of the invention of introduce restriction sites into the chicory germacrene A synthase A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; transcription activation; immunoglobulin E; IgE; IgE receptor;
Fc-epsilonRI; USF-1; USF-2; allergy; ss.
                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA having a transcription activating region of a gene, used for developing an agent for preventing and treating allergic diseases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.9%; Score 15.2; DB 1; Length 23; 85.0%; Pred. No. 6.5e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                0.9%; Score 15.2; DB 1; Length 23; 85.0%; Pred. No. 6.5e+02;
                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                  Human Fc-epsilonRI alpha-chain gene oligonucleotide #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 23 BP; 3 A; 12 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                           Sequence 23 BP; 4 A; 9 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 4; Page 6; 12pp; Japanese.
                                                                                                                                                                                           116 CGATCGCCATGGATCGGATG 135
                                                                                                                                                                                                          21 CGAGAGCCATGGTTCGGATG 2
                                                                                                      CDNA (AAA97448) for subcloning
                                                                                                                                                                                                                                                                    BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99JP-00234854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ASAK ) ASAHI BREWERIES LTD
                                                                                                                                                                                                                                                                    AAH19543 standard; DNA; 23
                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                       17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-310666/33
                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                           JP2001057889-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TSUR/) TSURA
                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-AUG-1999;
                                                                                                                                                                                                                                                                                                              23-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                06-MAR-2001.
                                                                                                                                                                                                                                                                                        AAH19543;
                                                                                                                                                Query Match
                                                                                                                                                             Best Loc
Matches
                                                                                                                                                                                                                                               RESULT 499
                                                                                                                                                                                                                                                          AAH19543
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
                                                                                                                                                                                                                                                                                                                                                                                                                           Human, transcription activation, immunoglobulin E; IgE; IgE receptor;
Fc-epsilonRI; USF-1; USF-2; allergy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence is provided in a specification relating to a DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA having a transcription activating region of a gene, used for developing an agent for preventing and treating allergic diseases.
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Pred. No. 6.5e+02;
); Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                Human Fc-epsilonRI alpha-chain gene oligonucleotide #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 23 BP; 5 A; 3 C; 12 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human chromosome 1p36-35 PCR primer SEQ ID NO:292.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 4; Page 5-6; 12pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 918 GITCCTGTTCCAGCTGCTCC 937
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                                                                                                                                                                                                                                 (first entry)
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                                             AAF99964 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BREWERIES
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(TSUR/) TSURA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-AUG-1999;
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                                                                                                                                       AAF99964;
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Matches
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110 ABL4
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AAF99964/
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Matches 17; Conservative

Best Local Similarity

Query Match

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ABZ84155
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                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                    The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in method comprises: (b) a clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker containing to corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. to array the multiwell containination Nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals and laters are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The crones are mixed longers in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The crones are mixed plates are specified from the multiwell plates are specified from the analysis. ABH42957 to ABH45323 to ABH4534 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mouse, transgenic, 11-beta hydroxysteroid dehydrogenase type 2; therapy, 11betaHSD2; cardiac dysfunction; PCR; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense PCR primer used in the creation of 11betaHSD2 mice.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.9%; Score 15.2; DB 1; Length 23; 85.0%; Pred. No. 6.5e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 23 BP; 11 A; 10 C; 1 G; 1 T; 0 U; 0 Other;
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                                                                                                                                                                                                   Claim 4; Page 10; 528pp; Japanese
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11-FEB-2003; 2003US-00361848.
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                                                     12-MAR-2001; 2001JP-00068285
                                                                                10-MAR-2000; 2000JP-00066716
                                                                                                        (RIKA ) RIKAGAKU KENKYUSHO.
(GENO-) GENOTEX YG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAD58475 standard; DNA; 23
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Matches 17, Conservative
                                                                                                                                                                           Arraying genome clones.
                                                                                                                                                WPI; 2002-144136/19
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  JP2001321190-A
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                           20-NOV-2001
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Determining a toxicological response to an agent, useful for screening of drugs, comprises comparing the expression profile of one or more human toxic response genes to a reference gene expression profile indicative of
                                                                                                                                                                                                                               hydroxystěroid dehydrogěnase 2 in its heart, useful ás a moděl system for identifying and developing new drugs for treating cardiac dysfunction.
                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a transgenic mouse which expresses an increased amount of enzyme activity of 11-beta hydroxysteroid dehydrogenase type 2 (11betaHSD2) in its heart relative to a non-transgenic isogenic mouse. The transgenic mouse is useful as a model system for identifying and developing new drugs for treating cardiac dysfunction. The present sequence is a PCR primer used in the creation of 11betaHSD2 mice
                                                                                                                                                                                           New transgenic mouse expressing an increased activity of enzyme 11-beta hydroxysteroid dehydrogenase 2 in its heart, useful as a model system for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Poxicologically relevant gene; toxicological response; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a method (M1) for determining a toxicological response to an agent, which comprises comparing the expression profile of one or more human toxic response genes to a reference gene expression profile indicative of toxicity, and so determining the presence of a toxic response to the agent. Also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dunn RT, Adkins K, Pickett GG, Kier LD, Schmeiser K;
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 23 BP; 7 A; 8 C; 7 G; 1 T; 0 U; 0 Other;
                                                               Rudolph AE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Toxicologically relevant rat PCR primer #1314.
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                                                               Goellner J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 334; 455pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         237 TGGTGGCGCCAGTGACCCTG 256
                                                                                                                                                                                                                                                                                                                                             Example 1; Page 9; 35pp; English.
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                                                                   Wenning Q,
(PHAA ) PHARMACIA CORP.
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                                                                                                                                      WPI; 2003-671623/63
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Best Local Similarity
Matches 17; Conser
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                                                                   Mcmahon EG,
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Synthetic.
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Alen P;
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described: (1) an array comprising one or more polynucleotides selected from the genes corresponding to the partial sequences given in ABZ82842 to ABZ84764, or their fragments of at least 20 nucleotides, or homologues; and (2) determining if a gene putatively identified to be a toxic response gene plays a role on toxic response pathways by determining the expression profile of the gene after exposure of cells or a human subject to a known toxic pharmaceutical or industrial agent, comprising: (a) exposing cells to an agent or isolating cells from a human subject who was exposed to an agent; (b) obtaining the test gene expression profile for a putatively identified toxic response gene after exposure to a known toxic pharmaceutical or industrial agent; and (c) comparing the test profile to the expression profile of a gene with a similar function or comparing the test profile to the expression profile of a gene with a similar function or exposure to other known toxic compounds. The methods are useful for predicting and determining toxicological responses on a cellular, organ to represent levels in the human genes are useful for the configuration of toxicological responses are useful for the paramaceutical compounds. The human genes are useful for the paramaceutical comparing the human genes are useful for the configuration of toxicological responses on a cellular, organ toxicological responses are useful for the configuration of toxicological responses on a cellular, organ toxicological responses are useful for the configuration of toxicological responses on a cellular or the configuration or the paramaceutical comparisor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            toxicological screening of drugs, pharmaceutical compounds and chemicals
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0.9%; Score 15.2; DB 1; Length 23; 35.0%; Pred. No. 6.5e+02; 3; Indels 0; Mismatches 845 AGTACCTGGACAAGGACCTG 864 85.0%; Local Similarity 85.0 nes 17; Conservative Query Match Matches à 엄

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Gaps

0;

22 AGTCGCCGGACAAGGACCTG 3

ADM32957 standard; DNA; 23 (first entry) 17-JUN-2004 ADM32957; ADM32957/ 

PCR primer P74 used to amplify 150bp cDNA encoding To32 N-terminal.

BP.

protein production; moss; protoplast; To32 protein; thaumatin-like protein; PCR; primer; ss.

Synthetic

WO2004024927-A1.

25-MAR-2004.

12-SEP-2002; 2002EP-00020382. 11-JUL-2003; 2003EP-00015881.

38-SEP-2003; 2003WO-EP009959.

(GREE-) GREENOVATION BIOTECH GMBH.

Gorr G, Launhardt H,

WPI; 2004-270051/25.

Achieving transient expression of at least an extracellular non-plant protein from a heterologous nucleotide sequence in moss protoplast comprises transiently introducing into the protoplast a heterologous nucleic acid construct.

Disclosure; Page 18; 49pp; English.

The specification describes a method for the production of extracellular non-plant protein from moss protoplasts. The method comprises transiently introducing into the protoplast a heterologous nucleoid sequence operably linked to a promorter. The heterologous nucleoide sequence operably linked to a promorter. The heterologous nucleoide sequence encodes a protein selected from heterodimer, fusion antibody, immunoglobulin or single-chain antibody. The method is useful for protein production. PCR primers

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The invention relates to a compound for silencing a gene comprising a single-stranded nucleic acid molecule having a 3' end, a 5' end and a cargeting region positioned between the 3' end and the 5' end, where the cargeting region comprises a sequence targeted to a target region in the gene, and the 3' end and the 5' end each comprise a sequence that enables the formation of a haripin structure. Also included are a recombinant covertor comprising a nucleic acid encoding the compound cited above, a host cell comprising the nucleic acid mentioned above, an oligonucleotide having the structure H 2 - R 1 (where R 1 is an oligonucleotide consisting essentially of RNA or DNA of bout 8-50 nucleotides configured consisting sequences that enable the formation of a haripin consisting espectical composition for silencing a gene (comprising a pharmaceutical composition for silencing a gene (comprising a pharmaceutical composition for silencing a gene (comprising a method are useful for gene silencing purposes RNA (e.g. siRNA) and DNA oligonucleotides are provided which are useful in the composition the method are useful for gene silencing the RMP9 (not defined) gene targeting the Ps region. The present sequence is a multiple cloning site which is inserted into a necessal introprorated into terminal hairpin-containing oligonucleotides which are configured.
                                                                                                                                                       ö
ADM32956-ADM32957 were used to amplify a 150 bp fragment of cDNA encoding
the N-terminal of a plant thaumatin-like To32 protein, in the course of
the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New sequence-specific oligonuclectide for silencing genes comprises a 3' end, a 5' end and a targeting region positioned between the 3' end and the 5' end.
                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                    Multiple cloning site for antisense/hairpin oligonucleotides #3.
                                                                                                                                                       ..
0
                                                                                                               Length 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RNA interference; gene silencing; MMP9; ds; hairpin; siRNA.
                                                                      Sequence 23 BP; 7 A; 6 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                            Score 15.2; DB 1;
Pred. No. 6.5e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; SEQ ID NO 13; 37pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Prakash RK;
                                                                                                                                                                                        916 CTGTTCCTGTTCCAGCTGCT 935
                                                                                                                                                                                                                            N
                                                                                                                                                                                                                        21 CTGACCTGGTCCAGCTGCT
                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-OCT-2002; 2002US-00273678
                                                                                                               0.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-OCT-2002; 2002US-00273678
                                                                                                                                 82.0%;
                                                                                                                                                                                                                                                                                                                        ADM10656 standard; DNA; 23
                                                                                                      Query Match
Best Local Similarity 85.0°
                                                                                                                                                                                                                                                                                                                                                                                               15-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Koehn RK, Ruffner DE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (KOEH/) KOEHN R K.
(RUFF/) RUFFNER D E.
(PRAK/) PRAKASH R K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2004-340007/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2004077082-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-APR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                             ADM10656;
                                                                                                                                                                                                                                                                                   RESULT 505
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Gaps

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Indels

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Mismatches

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Conservative

15;

Matches

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                                                                                                                                                                                                                                                                                                                                                                                             Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGFF1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 oligonucleotides of the present invention (see AAFF5151 and AAFF5153-
P45161). The method is useful for ameliorating the effects of psoriasis,
ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
neoplasias, selenderma, warts, benign growths, cancers of the skin, a
hyperneovascular condition such as a neovascular condition of the retina
brain or skin, growth factor-mediated malignancies, other sclerotic
disease, kidney disease, hyperproliferation of the inside of blood
                                                                       Gaps
                                                                       0;
                               Length 23;
                               Score 15.2; DB 1; Length 2
Pred. No. 6.5e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 2 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
BP; 8 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 8; Page 71; 201pp; English
                                                                                                           364 GAGAGTGACCAGGCTTCAGC 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             vessels or any other hyperplasia
                                                                                                                                                   gácagrcaccaagcrrcage 23
                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-0140345P.
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                                     0.9%;
                                                                                                                                                                                                                                                                                                                                                                 IGF-I oligonucleotide #1578.
                                                                                                                                                                                                                                                                                                                           (first entry)
                                 Query Match
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Werther GA,
                                                                                                                                                                                                                                                 AAF50618 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-041421/05
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-JUN-1999;
                                                                                                                                                                                                                                                                                                                           30-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wraight CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-DEC-2000
Sequence 23
                                                                                                                                                                                                                                                                                       AAF50618;
                                                                                                                                                                                                               RESULT 506
                                                                                                                                                                                                                                   AAF50618
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DB 1; Length 15; 4.8e+02;

0.9%; Score 15; 100.0%; Pred. No.

Query Match Best Local Similarity

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        present invention relates to a method for ameliorating the effects of
                                                                                                                                                                                                                                                               Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, barian or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperpoliferation of the inside of blood vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFB9]-2 or IGFB93), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AARASIS1 and AAFASIS3-F851G1). The method is useful for ameliorating the effects of psoriasis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 1 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.9%; Score 15; DB 1; Le
100.0%; Pred. No. 4.8e+02;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 8; Page 71; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; FIT
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1101 GTACCGGCCCCCTGA 1115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-JUN-2000; 2000WO-AU000693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-0140345P
                                    15
                                                                                                                                                                                                                                          IGF-I oligonucleotide #1577
                                                                                                                               AAF50617 standard; DNA; 15
                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200078341-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                       30-MAR-2001
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                                                                                                                                                                    AAF50617;
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                                                                                             RESULT
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GGTACCGGCCCCCTG 15

AAL61692 standard; DNA; 15

**AAL61692** 

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Antisense therapy; antiproliferative; antinflammatory; antipsoriatic; vytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide. (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the effects of postiasis, oligonucleotides of the present invention (see AAF45151 and AAF4153-F45161). The method is useful for ameliorating the effects of postiasis, nothyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.9%; Score 15; DB 1; Length 15; 00.0%; Pred. No. 4.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 2 A; 8 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 8; Page 71; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     vessels or any other hyperplasia
                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-0140345P.
                                                                                                                                                                IGF-I oligonucleotide #1579.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-JUN-2000; 2000WO-AU000693
                                        AAF50619 standard; DNA; 15
                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-JUN-1999;
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                                                                                                                          30-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-DEC-2000
                                                                               AAF50619;
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RESULT 508
                     AAF50619
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              protein kinasel, particularly a hyperproliferative disease or a neurological disease. These diseases include thrombocytopaenia, mental neurological disease. These diseases include thrombocytopaenia, mental retardation, Wiskott-Adrich syndrome, retinitis pigmentosa, dystonia with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth disease, or incontinentia pigmenti. The antisense oligonucleotide is particularly useful for inhibiting the expression of PCTAIRE protein kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence is human PCTAIRE protein kinase 1 DNA specific PCR primer. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonucleotides for modulating PCTAIRE protein kinase 1 gene expression, particularly useful for treating hyperproliferative or neurological disorders for example, mental retardation, or
                                                                                                                                                 Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia; hyperproliferative disease; neurological disease; thrombocytopaenia; retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy; mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism; PTCK1; crk5; incontinentia pigmenti; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                              Human PCTAIRE protein kinase 1 DNA specific forward PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
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100.0%; Pred. No. 4.8e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 1 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human G-alpha-12 antisense inhibitor ISIS# 20658.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 13; Page 71; 104pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                             07-DEC-2001; 2001US-00017621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95 AGGTTGCTCGCGCGC 109
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                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Roach MP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-577271/54.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          thrombocytopenia.
                                                                                                                                                                                                                                                                                                          WO2003049691-A2.
                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                        22-SEP-2003
                                                                                                                                                                                                                                                                                                                                                19-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Freier SM,
                                    AAL61692;
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Gaps .; 0

0; Indels

Mismatches

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15; Conservative

Best Local Similarity Matches 15; Conserv

100.08;

1102 TACCGGCCCCTGAC 1116

TACCGGCCCCCTGAC 15

RESULT 509

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This is a human G-alpha-12 antisense nucleotide sequence. G-alpha-12 is a member of the G12/13 subfamily of G-proteins. The primary function of G-alpha-12 is in cell differentiation and growth. The invention relates to antisense compounds which are 8-30 nucleotides long (see AAZ57668-CZ57746). The antisense molecules are targeted to the human G-alpha-12 concleic acid molecule, and inhibit the expression of G-alpha-12. The wolecules preferably have a modified internucleotide linkage, and at C least one modified sugar moiety. The compounds target different regions of the human G-alpha-12 RNA. The expression of human G-alpha-12 is inhibited by contacting human cells or tissues in vitro with the antisense molecules. The olionucleotides are used in modulating the contacting human cells or tissues in vitro with the contacting human cells or tissues in vitro with the contacting human cells or tissues in vitro with the contacting human cells or tissues in vitro with the contacting human cells or tissues in vitro with the contacting the amount of G-alpha-12 produced. The antisense compounds can be utilized for diagnostics, therapeutics, prophylaxis and as research agents and kits. They may be useful in the treatment of cancer, and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                antibacterial; vaccine; mmpL6; Mycobacterium; BCG; TbD1; ss; PCR; primer.
           G-alpha-12 inhibitor; antisense compound; cell differentiation; cancer; cell growth; metastatic growth; ss; ISIS# 20658.
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100.0%; Pred. No. 5.7e+02;
ve 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                             Antisense inhibition of human G-alpha-12 expression.
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                                                                                                                                                                                                                                                                                                                                                                                                   Example 15; Col 38; 36pp; English.
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100.0%; Pre-
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                                                                                                                                                                                                                 99US-00256496.
                                                                                                                                                                               99US-00256496
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Best Local Similarity 100.
Matches 15; Conservative
                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                           WPI; 2000-095920/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                metastatic growth
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                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-JUN-2004
                                                                                                                                                                               23-FEB-1999;
                                                                                                         US5998206-A.
                                                                                                                                             07-DEC-1999
                                                                                                                                                                                                                                                                                         Cowsert LM;
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The invention relates to a novel isolated or purified nucleic acid. A polypeptide encoded by a nucleic acid of the invention has antibacterial activity, and may have a use in a vaccine. The nucleic acid is a TbD1 nucleic acid having a fully defined sequence of 3953 bp given in the specification. The TbD1 deletion or mmpL6 551 polymorphism is useful as a genetic marker for the differentiation of Mycobacterium strain of M. tuberculosis complex. The genetic marker is ablected from RD1, RD2, RD3, RD4, RD5, RD6, RD7, RD8, C genetic markers selected from RD1, RD2, RD3, RD4, RD5, RD6, RD7, RD8, C genetic markers selected from RD1, RVD2, RVD3, RVD5, RVD5, RVD5, RVD5, RVD5, RVD5, RD6, RD7, RD8, C gyrA95, coxyR.285, and pncA57, may be used for the differentiation of Mycobacterium strain of M. tuberculosis complex. The nucleic acids may also be used to distinguish an infection resulting from M. tuberculosis from an infection resulting from M. africanum, M. canetti, M. microti, M. bovis, M. bovis BCG. The present sequence is used in the exemplification
                                                                                                            New TbD1 nucleic acids having the mutation CTG to CGG at codon 463 of gene katG, useful for distinguishing Mycobacterium tuberculosis infection from M. africanum, M. canetti, M. microti, M. bovis, or M. bovis BCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
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                                             Garnier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18 BP; 0 A; 4 C; 10 G; 4 T; 0 U; 0 Other;
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100.0%; Pred. No. 5.7e+02;
ive 0; Mismatches 0;
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                                             Gordon S, Eiglmeier K,
                                                                                                                                                                                                Disclosure, Page 21; 73pp; English.
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Best Local Similarity
' - hes 15; Conserva
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              (INSP ) INST PASTEUR
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                                                                                WPI; 2003-699254/67
                                               Brosch R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200032765-A2.
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                                             Cole S,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                               in
                                           The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic,
                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:204.
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                                                                                                                                                                                                                                                                                                                      100.0%; Prea. ...
                                                                                                                                                                                                                                                                                                       0.9%; Score 15;
100.0%; Pred. No.
  Disclosure; Page 49; 109pp; English.
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                                                                                                                                                                                                                  restenosis treatment
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                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                     Matches
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dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic warr. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, virreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypetrophic or hypetrophic burn scar. AAH57577 to AAH67099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This is one of 12 probes which differ only in the sequence at the TagI site in the wild-type c-Ha-ras corresponding to nucleotides 2508-2511. The "mutant" probes are used to detect the 12 possible base-pair mutations potentially induced by treatment of cells with the carcinogen ethylnitrosurea. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polymerase chain reaction; PCR; nested primer; mutation; screening;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Quantitative determination of DNA sequences - contg. mutationally eliminated restriction site(s), chain reaction using polymerase amplification and elimination of wild-type sequences.
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100.0%; Pred. No. 6e+02;
cive 0; Mismatches 0; Indels
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/note= "mutant TaqI site"
                                                                                                                                                                                                                                                                                                                                                 exemplification of the present invention
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Matches 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pourzand C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ15415;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 5
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Sequence 20 BP; 4 A; 10 C; 3 G; 3 T; 0 U; 0 Other;

ADA66485 standard; DNA; 20 BP.

ADA66485

(first entry)

20-NOV-2003

ADA66485;

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CDNA was extracted from genital lesions, reverse transcribed to produce CDNA and then the CDNA was used as the template for PCR amplification of various ortokines using the primers in AAT3806+ AAT39005. To confirm the identity of amplified cDNA, digoxiganin-labelled probes specific for each cytokine (see AAT39006-T39021) were hybridised with Southern blots of amplified sequences. The expression profile for regressing and noncrepressing warts was established and compared to cytokine expression patterns in normal cervical tissue. Results showed that interleukin 12 is parely expressed (if at all) in non-regressing warts, but is expression regressing warts. This suggests a central role for IL-12 in wart regressing varts. It has been found that IL-12 can be used (especially as a vaccine adjuvant) for treating papilloma virus-associated lesions such as condyloma acuminata (anogenital warts) caused by human papilloma virus type 6 (HPV-6) and/or HPV-11 and more generally for treatment of tumours associated with HPV16 and HPV18 infection e.g. anogenital, cutaneous,
                                          ó
                                                                                                                                                                                                                                                                                                                                                Cytokine; expression profile; genital wart; interleukin 12; IL-12; tumour regression; adjuvant; polymerase chain reaction; PCR; condyloma acuminata; human papilloma virus; HPV-6; HPV-11; HPV16; HPV18; anogenital; cutaneous; laryngeal; oesophageal; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Use of interleukin-12 to treat papilloma virus-associated lesions - esp. as a vaccine adjuvant with papilloma virus antigen for immuno:therapy of
                                          Gaps
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 20;
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llarity 100.0%; Pred. No. 6.3e+02;
Conservative 0; Mismatches 0; Indels
       DB 1; Length 20; 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 9 A; 5 C; 1 G; 5 T; 0 U; 0 Other;
0.9%; Scc...
100.0%; Pred. No. c...
... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYCA-) UNIV CAMBRIDGE TECH SERVICES LTD.
                                                                                                                                                                                                                                                                                                                  Interleukin IL-8 hybridisation probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 16; 32pp; English.
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                                                                                    984
                                                                                                      CTACACCGAGACCTC 19
                                                                                                                                                                                                           50
                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Laryngeal and oesophageal
             Query Match 0.9°
Best Local Similarity 100.
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scarpini CG;
                                                                                    CTACACCGAGACCTC
                                                                                                                                                                                                             AAT39013 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1996-442947/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           warts or tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9629091-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-MAR-1995;
                                                                                                                                                                                                                                                                                  29-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stanley MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-SEP-1996,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                    970
                                                                                                                                                                                                                                                 AAT39013;
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                                                                                                                                                                          RESULT 515
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel antisense compound which is targeted to nucleic acid encoding transforming growth factor beta-3, and inhibits expression of TGF-beta 3, useful for treating a condition associated with TGF-beta 3, e.g. cancer.
                                                                                                                                                                                                                                                                 /nord= "This oligonucleotide has a phosphorothioate backbone and 2-'methyoxyethyl (2'-MOE) wings at the 5' and 3' ends, which are 5 nucleotides in length. Also all
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to antisense oligonucleotides (ADA66459-ADA66609), which inhibit Transforming Growth Factor (TGF) beta-3 expression. The oligonucleotides are useful for inhibiting the expression of TGF-beta3 in cells or tissues, and to treating an animal having a disease condition associated with TGF-beta3, e.g. a hyperproliferative disorder such as cancers of lung, liver, colon, oesophagus, pancreas, breast, skin or haematopoletic, atherosclerosis, rheumatoid arthritis,
                                                                       44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                  Transforming growth factor-beta 3 antisense oligonucleotide, SEQ ID
                                                                                              Cytostatic; antirheumatic; antiarthritic; gynecological; antiarteriosclerotic; Transforming Growth Factor beta-3; TGF beta-3, hyperproliferative disorder; cancers; atherosclerosis; rheumatoid arthritis; preeclampsia; fibrosis; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                  cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 15; DB 1; Le
Pred. No. 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Pred. ...
                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 3; Page 87; 154pp; English.
                                                                                                                                                                                                                                                        /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВЪ.
                                                                                                                                                                                                                                                                                                                                                                                                            12-JUL-2002; 2002WO-US022423.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    449 TCTCCACTGAGGACA 463
                                                                                                                                                                                                                                                                                                                                                                                                                                         14-JUL-2001; 2001US-00906158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADA66486 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             preeclampsia and fibrosis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTCCACTGAGGACA
                                                                                                                                                                                                                              1. ...
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-229569/22.
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                   WO2003008544-A2
                                                                                                                                                                                                               Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2003
                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Monia BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADA66486;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 517
ADA66486
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Gaps

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1068 AAAGACATACTCCAA 1082

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Local Similarity

15;

Best Loca Matches

2 AAAGACATACTCCAA 16

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The present invention relates to antisense oligonucleotides (ADA66459-ADA66609), which inhibit Transforming Growth Factor (TGF) beta-3 expression. The oligonucleotides are useful for inhibiting the expression of TGF-beta3 in cells or tissues, and for treating an animal having a disease condition associated with TGF-beta3, e.g. a hyperproliferative disorder such as cancers of lung, liver, colon, oesophagus, pancreas, breast, skin or haematopietic, atherosclerosis, rheumatoid arthritis, preeclampsia and fibrosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel antisense compound which is targeted to nucleic acid encoding transforming growth factor beta-3, and inhibits expression of TGF-beta 3, useful for treating a condition associated with TGF-beta 3, e.g. cancer.
                                                                                                                                                                                                                                            /note= "This oligonucleotide has a phosphorothioate backbone and 2-"methyoxyethyl (2-MoB) wings at the 5' and 3' ends, which are 5 nucleotides in length. Also all cytidine residues are 5-methylcytidines"
                                               SEQ ID 45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                       Cytostatic; antirheumatic; antiarthritic; gynecological; antiarterisoslescotic; Transforming Growth Factor beta-3; TGF beta-3 hyperproliferative disorder; cancers; atherosclerosis; rheumatoid arthritis; preeclampsia; fibrosis; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .,
                                            growth factor-beta 3 antisense oligonucleotide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 15; DB 1; Length 20;
Pred. No. 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IL-8; alpha; cytokine synthesis inhibitor; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; c...
100.0%; Pred. No. c...
'... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Probe to detect interleukin-8 sequences.
                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 3; Page 87; 154pp; English.
                                                                                                                                                                                                                               mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ37151 standard; DNA; 21 BP.
                                                                                                                                                                                                                                                                                                                                                                                 12-JUL-2002; 2002WO-US022423
                                                                                                                                                                                                                                                                                                                                                                                                               14-JUL-2001; 2001US-00906158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             449 TCTCCACTGAGGACA 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
              (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15; Conservative
                                                                                                                                                                                                 1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-229569/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                      WO2003008544-A2
                                                                                                                                                                                 Key
modified_base
                                            Transforming
               20-NOV-2003
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                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Monia BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ37151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 518
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Northern and Southern hybridisations were performed to determine the level at which IL-10 and IL-4 inhibit monokine production. The probe AAQ37151 was used in Southern analysis of PCR products to detect IL-8 alpha coding sequences. The sequence of the probe corresponds to nucleotides 200-221 of the sequence given in Schmid et al., (1987), J.Immunol. It was found that IL-1 alpha, IL-6, TNF alpha, GM-CSF and G-CSF expression was strongly inhibited by IL-10 and IL-4 at the mRNA level. IL-1 beta and IL-8 expression was only slightly affected by IL-10.
                                                                                                                                                                                                                                                                                                                                                                                                                     Spits H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Interleukin-10; IL-10; septic shock; bacterial infection; toxic shock; infectious shock; inflammation; immune response modulation; therapy; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            septic and toxic shock, auto-immune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·,
                                                                                                                                                                                                                                                                                                                                                                                                                  Ogarra A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.9%; Score 15; DB 1; Length 21;
100.0%; Pred. No. 6.68+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Use of interleukin-10 to modulate inflammation or T-cell
                                                                                                                                                                                                                                                                                                                                                                                                               Ishida H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 9 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Probe IL-8 for Interleukin-10 coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (Updated on 25-MAR-2003 to correct PN field.)
monokine production; Southern analysis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                            Hsu DH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example B6; Page 85; 208pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         function - for treating septic a tumours and infections diseases.
                                                                                                                                                                                                                                                                                                                                                                                                            De Waal Malefyt R, Howard M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1068 AAAGACATACTCCAA 1082
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92US-00926853.
94US-00229854.
                                                                                                                                                                                                                              92WO-US006378.
                                                                                                                                                                                                                                                                                           91US-00742129.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15; Conservative
                                                                                                                                                                                                                                                                                                                                               SCHE ) SCHERING CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1993-076172/09.
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                                                                                                                                                                                                                                 06-AUG-1992;
                                                                                                                                                                                                                                                                                        06-AUG-1991;
                                                                                                          WO9302693-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-MAR-1995;
                                                                                                                                                                       18-FEB-1993
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                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Zlotnik A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV08002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
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(SCHE ) SCHERING CORP.

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DNA encoding antigenic peptide(8) of new types of hepatitis C virus - for diagnosing and treating HCV infection, screening blood samples and identifying different HCV types.
                                                                                                                                                                                                                                                                                                                                                                                         Non-coding region; hepatitis C virus; blood donor; type 2; type 1; HCV; NS-5; phylogeny; differentiation; NS-3; core region; type 3; PCR; amplify; polymerase chain reaction; primer; NS4; ss.
                                                                                                                                                                                                                                                                                                                                                                             HCV type 1 NS-4 sense primer 196.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (COMM-) COMMON SERVICES AGENCY
                                                                                                                                                                                                                                                                1068 AAAGACATACTCCAA 1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91GB-00024696.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92WO-GB002143.
                                                                                                                                                                                                                                                                               2 AAAGACATACTCCAA 16
                                                                                                                                                                                                                                                                                                                      AAQ43129 standard; DNA; 23
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(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chan S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1993-182554/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-NOV-1991;
24-JUN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9310239-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-NOV-1992;
                                                                                                                                                                                                                                                                                                                                                     25-MAR-2003
23-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Simmonds P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-MAY-1993
                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
      Ishida H,
                                                                                                                                                                                                                                                                                                                                       AAQ43129;
                                                                                                                                                                                                                                                                                                        RESULT 520
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The sequences given in AAQ43112-33 are primers which were used to amplify specific regions of the hepatitis C virus (HCV) genome. Analysis of regions of the HCV genome revealed the existance of three distinct groups of HCV. Analysis of the region encompassing -255 to -62 of the 5' non coding region (NCR) (see AAQ43058-75) showed a difference of 9-14% in the nucleotide sequences between the three groups. Two of the groups identified were similar to those of HCV varients termed type 1 and 2, whilst the third appeared to repersent a novel type of virus. Comparison of the NS3 region (see AAR37927-30) showed a high degree of sequence diversity with type 3 being phylo- genetically different to type 1 and 2. The same degree different intion was noted in the NS-5 (see AAR37931) and the NS4 region (see AAR37931) and the NS4 region (see AAR37911) between type 3 and type 1 sequences. (Updated on 25-MAR-2003 to correct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 23 BP; 5 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             292 CGTTCTGCACGGGCCCACTCAG 314
                       Disclosure; Page 27; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAT41227 standard; DNA; 23 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 78.3%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PN field.
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                                                                                                                                                                                                                                                                                                                                          This sequence represents a probe for a interleukin-10 (IL-10) coding sequence. The IL-10 protein can be used in the method of the invention to ameliorating a symptom of: (a) septic shock in a host suffering from a bacterial (preferably gram negative) infection; (b) toxic shock; (c) infectious shock; or (d) inflammation. The method comprises administering a biologically active IL-10 (preferably human) protein, malogue or a fragment (preferably full length). The treatment is used to modulate immune responses caused by the different shock syndromes, which are conditions. The conditions are side-effects of microbial infections, caused by release of their protein products, especially on anti-microbial treatment, which when cells are killed, they lyse, releasing proteins which induce the shock conditions IL-10 inhibits INF-alpha (tumour necrosis factor-alpha) and INF-gamma synthesis, which as part of an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                            Treating shock conditions from e.g. bacterial infections - comprises
                             Zlotnik A;
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0.9%; Score 15; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.6e+02;
Matches 15; Conservative 0; Mismatches 0; Indels
                                 Howard M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 9 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
                                 Spits H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        immune response elicits the shock syndromes
                                       O'garra A,
                                                                                                                                                                                                                                                                                            Example 14; Col 42; 109pp; English
                                                                                                                                                                                                                                   administering interleukin-10.
                                    Malefyt RDW,
                                                                                                                                    WPI; 1999-008644/01
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Gaps

0

5; Indels

0.9%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 7.1e+02;

0; Mismatches

23 CATTCTGAACGCCCCAGTCTG 1

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primers T41001-T41382 are derived from novel human gene signature (GS) sequences which did not match with sequences deposited in Genbank release 76. The GS sequences (T19001-T26837) were obtained from 3 'directed cDNA libraries prepared from various human tissues; synthesis of cDNA was initiated from the 3'-end of mRNA by using poly(T) as the sole primer. Each library is constructed so as to reflect accurately the relative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Single-stranded DNA for identifying gene signatures - isolated from 3'-directed human cDNA library that reflects relative abundance of corresp.mRNA in specific human tissues.
                                                                                                      Gene signature; messenger RNA; mRNA; relative abundance; frequency; human; cloning; mapping; non-biased library; diagnosis; detection; cell typing; abnormal cell function; primer; PCR; amplification; polymerase chain reaction; ss.
                                                                            Human gene signature HUMGS01473-derived sense primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 7; Fig 8; 2245pp; Japanese.
                                                                                                                                                                                                                                                                                            94WO-JP001916.
                                              03-DEC-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                             Matsubara K, Okubo K;
                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1995-206931/27.
                                                                                                                                                                                                                                                                                                                                                             (MATS/) MATSUBARA K.
                                                                                                                                                                                                                                                                                                                                                                              (OKUB/) OKUBO K.
                                                                                                                                                                                                                                                                                              11-NOV-1994;
                                                                                                                                                                                                                                                                                                                             12-NOV-1993;
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                                                                                                                                                                                                                                                             01-JUN-1995.
                                                                                                                                                                                              Synthetic.
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Yap PL;

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Gene expression cassette, promoter; alcR regulator; insecticide; CryIA(c); CryV; crystal protein; delta-endotoxin; Bacillus thuringinesis; Lepidoptera; insect resistance; transgenic plant; crop protection; biological control; polymerase chain reaction; PCR; primer; ss.
abundance of different mRNAs in the particular tissue from which it was derived. The appearance frequency of a given GS in a cDNA library can be determined (esp. using primers and probes derived from the GS sequences) as a means of diagnosing abnormal cell function or for recognising different cell types. The primers T41227-8 amplify clone pm2231 which comprises the GS HUMGS001473 (T20473), located on chromosome 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR primers (AAT59707-11) were designed to test tobacco (Nicotiana tabacum cv. Samsun) plants for the presence of Bacillus thuringiensisderived Cryv (see also AAT597012) sequences following Agrobacterium-mediated transformation with vectors carrying novel constitutive or inducible gene expression cassettes. (AAT59705)/CRY1A2R (AAT59706) and CRYIA1 (AAT59707)/NOS (AAT59708), constitutive Cryv expression with TMVI/CRYVIR (AAT59709) and CRYVI (AAT59709) and cRYVI (AAT59709) and cRYVI (AAT59709) and inducible Cryla(c) expression with AACRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chemically inducible expression cassette - contains inducible promoter activated by alcR regulator in presence of alcohol or ketone inducer, used for insecticide production in plants.
                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                            .
0
                                                                                                                                                                 0.9%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 7.1e+02; tive 0; Mismatches 5; Indels
                                                                                                                             Sequence 23 BP; 5 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 23 BP; 4 A; 7 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                        396 TGAGGTGCAGTCTCCAGTGAGAG 418
                                                                                                                                                                                                                                                                          1 readcrecacrracerereasis 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 6; Page 13; 52pp; English.
                                                                                                                                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96WO-GB001846.
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                                                                                                                                                                                                                                                                                                                                                                    AAT59709 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                      18; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1997-154272/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ZENE ) ZENECA LTD.
                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer CRYVIR.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9706268-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-JUL-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                       12-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-FEB-1997,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
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                                                                                                                                                                   Query Match
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                                                                                                                                                                                                      Matches
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The present PCR primer was used to amplify cDNA encoding a fragment containing exon 1c of a murine mu-opioid receptor (MOR-1) splice variant. The specification describes 11 new exons for the MOR-1 gene, which combine to yield 15 novel splice variants of the MOR-1 gene. These splice variants are potential targets for modulating morphine analgesia and opioid mediated ingestive responses. The MOR-1 polypeptide is used to soried for opioid activity. Such compounds are potential analgesics or more generally agents that affect gastrointestinal motility, respiration or the immune, endocrine or autonomous nervous systems, e.g. regulators of peristatis. Antagonists, agonists and ligands of MOR-1, as well as DNA vectors expressing MOR-1-encoding nucleic acids, or sequences antisense to MOR-1 nucleic acids, are used to regulate morphine analgesia and body weight. The level of MOR-1 or tissue
                                                                                                                                                                                                                                                   Mu-opioid receptor; MOR-1; splice variant; morphine analgesia; opioid-mediated ingestive response; opioid activity; analgesic; gastrointestinal motility; respiration; immune system; endocrine system; autonomous nervous system; peristalsis regulator; body weight; neuroendocrine disorder; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pharmacological abnormalities or neuroendocrine disorders, particularly inherited disorders. Transgenic animals with extra copies of the MOR-1 gene, or with endogenous alleles deleted, are used to study loss or gain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New splice variants of the mu-opioid receptor, useful in screening selective analgesics and for regulating morphine analgesia or body
                                                                                                                                                                                                                      PCR primer used to amplify mu-opioid receptor splice variant cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   distribution of MOR-1 can be measured to diagnose MOR-1 related
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0; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (SLOK ) SLOAN KETTERING INST CANCER RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1715 GCCTGAGCCATGTTCACCTGCCC 1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Page 33; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23 GCCTTAGCCACTACCACCTGCCC 1
23 TGGAGCAGGTGACCATCTACAGC
                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99WO-US015974,
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                                                                                                              23
                                                                                                                                                                                  (first entry)
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Best Local Similarity 78.3
Matches 18; Conservative
                                                                                                            DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of function phenotypes
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                                                                                                            AAZ60724 standard;
                                                                                                                                                                                                                                                                                                                                                                                                     WO200004046-A2.
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                                                                                                                                                                                  16-MAY-2000
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                                                                                                                                                AAZ60724;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   weight.
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                                                                        RESULT 523
                                                                                           AAZ60724
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Query Match 0.9%; Score 15; DB 1; Length 23; Best Local Similarity 78.3%; Pred. No. 7.1e+02; Matches 18; Conservative 0; Mismatches 5; Indels

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AAA29067-68 are primers for amplification of the human beta-actin gene which was used as a control when amplifying the BEER gene to determine its tissue-specificity. BEER is a human transforming growth factor-beta (TGF-beta) binding protein (BEER). The HBEER gene has been localized to the chromosome 17q12-21. The CDNA and protein may be used for prevention, treatment and diagnosis of diseases associated with inappropriate BEER syression. For example, they may be used to treat disease associated with decreased TGF-beta BP expression. The CDNA or vectors may be administered to treat diseases by rectifying mutations or deletions in a patient's genome that affect the activity of BEER by expressing inactive proteins or to supplement the patients own production of BEER oppositions. The nucleic acids may be used for recombinant production of BEER, gene therapy, antisense therapy, as probes for diagnostic assays and for identification of BEER modulators. BEER may be used to raise antibodies and for increase bone mineral content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders such as the content for the treatment of disorders as the content for the treatment of disorders and for the treatment of disorders as the content for the treatmen
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0
                                                                                                                                                                                                                       osteopathic; transforming growth factor-beta; TGF-beta; binding protein; BEER; chromosome 17q12-21; gene therapy; antisense therapy; fracture; bone mineralization; primer; beta-actin; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic acids (I) encoding a transforming growth factor beta binding protein, useful for identifying agents for treating osteopenia, osteoporosis and fractures.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.9%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 7.1e+02; ive 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
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                                                                                                                                                                                    Sense PCR primer for human beta-actin gene.
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                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-US027990.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0110283P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (DARW-) DARWIN DISCOVERY LTD
                           AAA29067 standard; DNA; 23
                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 0.9
Best Local Similarity 78.3
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Galas DJ, 1
Winkler DG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-412321/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           low mineral content
                                                                                                                                                                                                                                                                                                                                                                                                 WO200032773-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Brunkow ME,
                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-NOV-1998;
                                                                                                                                   12-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jan Ness J,
                                                                               AAA29067;
à
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1 AGGCCAACGCGAGAAGATGACC 23

AAA13193 standard; DNA; 23

RESULT 525

AAA13193

20-JUL-2000 (first entry)

AAA13193;

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This sequence represents a PCR primer used in the detection of a single nucleotide polymorphism (SNP) in the human alpha4-integrin promoter nucleotide sequence defined in EMBL 126659. The invention relates to the diagnosis of SNPs in the human alpha4-integrin subunit gene, comprising determining the sequence of the gene in at least one of 5 positions within the coding region and/or 8 positions within the promoter region of the gene. Diagnosis of SNPs in the human alpha4-integrin subunit gene comprises determining the gene sequence in at least one of the following positions: (1) 740, 2273, 2446, 3311 and 3506 in the coding region of EMBL 126509) and/or (3) 184, 238, 331, 436, 676, 1010 or 1115 in the promoter region (EMBL M26641). The method is used to identify subjects of diseases, e.g. autoimmune, allergic and vascular inflammatory diseases cis also used to identify patients who will benefit from treatment with sallo used to identify patients who will benefit from treatment with corresponses and to determine the therapeutic dose. Nucleic acid sequences that contain at least one polymorphism are used to screen for compounds the rappeutic agents that may target selectively one or more alleles of the therapeutic agents that may target selectively one or more alleles of the readable storage medium containing the polymorphic sequences is useful corrected. They may also be useful as antisense therapeutics. A computercent of the mology searches, mapping, haplotyping, genotyping and pharmacogenetic, or other bioinformatic, analysis. The polymorphisms, particularly those at 2273, 3311 and 1010, which are relatively common, are useful as genetic markers in linkage studies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                              PCR primer; alpha4-integrin; single nucleotide polymorphism; SNP; human; autoimmune disease; allergy; inflammatory disease; multiple sclerosis; rheumatoid arthritis; asthma; genetic marker; detect; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Detecting single nucleotide polymorphisms in the alpha 4-1 integrin subunit gene, useful for diagnosing e.g. autoimmune disease and for screening for ligand antagonists.
          PCR primer 944-966 used in alpha4-integrin polymorphism detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 7.1e+02;
); Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 23 BP; 6 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.9%; Score 15; DB 1; 78.3%; Pred. No. 7.1e+02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60 ACTGCTGAAACCCAGGGGAGGGC 82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 4; Page 24; 38pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 ACTTCTGAAACCCAGAGCTGGCC
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                                                                                                                                                                                                                                                         99WO-GB003071
                                                                                                                                                                                                                                                                                                 98GB-00020339
98GB-00024506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-283615/24
                                                                                                                                                                                                                                                                                                                                                              (ZENE ) ZENECA LID.
                                                                                                                                                                                WO200017394-A1.
                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                           15-SEP-1999;
                                                                                                                                                                                                                                                                                                                        10-NOV-1998;
                                                                                                                                                                                                                                                                                                   19-SEP-1998;
                                                                                                                                                                                                                   30-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                      Morten JEN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAS04272
ID AAS0
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RESULT

10017621-381.rng

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Human secreted protein; TANGO 298; chromosome 19p13; probe; bone marrow;
                                                     complement factor D; alternative complement pathway; complement regulator deficiency; serine protease dysfunction; adipsin; obesity; diabetes; blood and haematopoietic associated disorder; cardiovascular disorder; inflammatory disorder; immune disorder; ss.
                                                                                                                                                                  /mod_base= OTHER
/note= "OTHER=TAMRA"
                                                                                                             Location/Qualifiers
                                                                                                                                     /mod_base= OTHER
/note= "OTHER=FAM
                              Human TANGO 298 TaqMan probe.
                                                                                                                                                                                                                                               17-MAY-2000; 2000US-00572275.
                                                                                                                                                                                                                         27-OCT-2000; 2000WO-US029797
                                                                                                                                                                                                                                         99US-00417796
                                                                                                                                                                                                                                                               (MILL-) MILLENNIUM PHARM INC
               07-SEP-2001 (first entry)
                                                                                                                                                            /*tag= b
                                                                                                                            *tag= a
                                                                                                                                                                                                                                                                               Fraser CC, Hodge MR;
                                                                                                                                                                                                                                                                                               WPI; 2001-300479/31.
                                                                                                                                                                                          WO200130831-A1
                                                                                                                    modified base
                                                                                                                                                    modified base
                                                                                              Homo sapiens
                                                                                                                                                                                                                                         27-OCT-1999;
                                                                                                                                                                                                          03-MAY-2001
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(6-carboxyfluorescein)"

The present sequence for human TANGO 298 TagMan probe is used to measure human TANGO 298 gene expression by quantitative PCR. TANGO 298 (AAU02497) is a novel secreted protein isolated from clone jyhmal18f02 from a human bone marrow cDNA library. The gene for TANGO 298 maps to chromosome factor D) and may play a role in the alternative complement pathway and in regulation of systemic energy balance. TANGO 298 may be used to treat haemoglobinnia), obesity, diabetes, blood and haematopoietic associated disorders (e.g. looxysmal nocturnal haemoglobinnia), monocyte associated disorders (e.g. impaired phagocytosis) cardiovascular disorders (e.g. unstable angina, atherossis), immune disorders (e.g. arthritis, AIDS), inflammatory disorders (e.g. bacterial infection), disorders associated with abnormal calsorders (e.g. thromosis). The invention also describes the novel nucleic acid molecule encoding type II transmembrane proteins useful disorders (e.g. thrombosis). The invention also describes the novel secreted proteins human TANGO 269 (AAU02495) and murine TANGO 269 for treating immune related disorders Example 1; Page 103; 137pp; English.

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                                                               Gaps
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0
                             Score 15; DB 1; Length 23;
Pred. No. 7.1e+02;
0; Mismatches 0; Indels
Sequence 23 BP; 6 A; 13 C; 2 G; 2 T; 0 U; 0 Other;
                    0.9%; Scc.
100.0%; Pre
                          Query Match 0.9
Best Local Similarity 100.
Matches 15; Conservative
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1353 CCACGCACCCCGACT 1367

4 CCACGCACCCCGACT 18

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The present sequence is that of human Factor V (FV) gene primer A F5(254) -23D, used in bi-directional PCR amplification of specific alleles (Bi-23D, used in bi-directional PCR amplification of specific alleles (Bi-23D, used in bi-directional PCR amplification of specific alleles (Bi-23D, used of the FIX gene exon 10 and proceeding downstream for 23 bases. It also has a 5' G8C2 tail. A mutation (G to A transition) at bp thromboembolism. Detection of the mutation in the FV gene was used to thromboembolism. Detection of the mutation in the FV gene was used to primers (A and B) are each specific for different alleles. P is complementary to the antisense strand of both alleles in a region upstream of the sequence difference (mismatch). Q is complementary to the sense strand of both alleles in a region downstream of the compined segment of size PB resulting from the 2nd allele, and a combined segment of size PB resulting from the 2nd allele, and a combined segment of size PD resulting from the 2nd allele, and a combined segment of size PD resulting from the 2nd allele, and a combined segment of size PD resulting from the 2nd allele, and a combined segment of size PD resulting from the 2nd allele, and a very strong DNA band on agarose gels. Bi-PASA find and heterozygotes. It can detect small deletions and insertions as well as single base changes. Bi-PASA is also used to perform population.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         screening, haplotype analysis, patient screening and carrier testing. The method is rapid, reproducible, inexpensive, non-isotopic and amenable to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conducting a bi-directional polymerase chain reaction amplification of specific alleles, involves amplifying DNA containing one or both of two alleles using an outer pair of primers and an inner pair of primers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                              Factor V; human; FV gene; bi-directional PCR; Bi-PASA; mutation; zygosity; homozygote; heterozygote; genetic screening; diagnosis; venous thromboembolism; PCR primer; ss.
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 23 BP; 2 A; 8 C; 12 G; 1 T; 0 U; 0 Other;
                                                                                                                                          Human Factor V gene PCR primer A F5(254)-23D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example; Col 13; 22pp; English.
                   AAF30591 standard; DNA; 23 BP
                                                                                                                                                                                                                                                                                                                                                                                                             98US-00150900.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-0058575P
                                                                                                 (first entry)
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Best Local Similarity 78.3
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CITY ) CITY OF HOPE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-256850/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Liu Q, Sommer SS;
                                                                                                                                                                                                                                                                                                                          US6207425-B1.
                                                                                                                                                                                                                                                                 Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                           10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-SEP-1997;
                                                                                                   11-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                     27-MAR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      automation
                                                           AAF30591;
AAF3059
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Darfler M;

01-AUG-2002.

07-NOV-2002

ABT06518;

RESULT 528

ABT06518

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The invention relates to a composition comprising one or more nucleic acid molecules and at least one oligonucleotide, where at least a portion of the oligonucleotide is capable of hybridising with at least a portion of the nucleic acid molecule and where the oligonucleotide comprises a condition and molecule and where the oligonucleotide comprises a modified nucleotide at or near the 3'-terminal nucleotide. The various cone or more target nucleic acid molecules in a sample during nucleic acid cone or more target nucleic acid molecules in a sample during nucleic acid synthesis or amplification. The analogues are also useful for determining the presence or absence of one or more particular nucleotides at a capacitic position or positions in a target nucleic acid molecule. The analogue oligonucleotides can also be useful for synthesising or amplifying one or more nucleic acid molecules, by mixing one or more nucleic acid the mixture to synthesise or amplify one or more nucleic acid templates or targets with the analogue oligonucleotides, and incubating the mixture to synthesise or amplify one or more nucleic acid incubating the mixture to synthesise or amplify one or more nucleic acid molecules complementary to all or a portion of the templates or targets. This polynucleotide sequence represents a nucleic acid detection and discrimination related oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Composition comprising nucleic acid molecules and a oligonucleotide capable of hybridizing with a portion of nucleic acid, and comprises a modified nucleotide at or near the 3'-terminal nucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Beta-actin; bone morphogenic protein; human; glaucoma; diagnosis; therapy; ophthalmological; PCR; primer; 85.
                                        Nucleic acid detection and discrimination related oligo SEQ ID No
                                                                                         Hybridising; quantification; detection; synthesis; amplification;
oligonuclectide; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Match 0.9%; Score 15; DB 1; Let Local Similarity 78.3%; Pred. No. 7.1e+02; Local Similarity 78.3%; n. Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 23 BP; 7 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Solus J, Pires RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             945 GGCCTACTGCCACGGCAGAAGG 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTCTACAGCCACCATGAGAAGG
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                                                                                                                                                                                                                                                                                                                                     27-DEC-2001; 2001WO-US050460.
                                                                                                                                                                                                                                                                                                                                                                                           27-DEC-2000; 2000US-00748146.
23-OCT-2001; 2001US-0330468P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rashtchian A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACF05961 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
07-NOV-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (INVI-) INVITROGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Astatke M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-627370/67.
                                                                                                                                                                                                                                         WO200257479-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nazarenko I,
                                                                                                                                                                                     Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18;
                                                                                                                                                                                                                                                                                            25-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gebeyehu G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACF05961;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 530
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a method of diagnosing a cellular proliferative disorder of breast tissue, which involves determining the state of methylation of one or more nucleic acids isolated from the subject, where the state of methylation of the nucleic acids as compared with a state of methylation from a subject not having the cellular proliferative disorder of breast tissue is indicative of a cellular proliferative disorder of breast tissue in the subject. The nucleic acids may be TWAST, HOXAS, NES-1, retinoic acid receptor beta (RARbeta), may be TWASTIA. The method is useful for diagnosing and/or determining a predisposition to a cellular proliferative disorder, in particular breast cancer including ductal carcinoma in situ, lobular carcinoma, colloid carcinoma, tubular carcinoma, medullary carcinoma, metaplastic carcinoma, intraductal carcinoma medullary carcinoma in situ and carcinoma, in situ. The present sequence is a primer used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Diagnosing and/or determining a predisposition to a cellular proliferative disorder of breast tissue, in particular breast cancer, by determining the state of methylation of one or more nucleic acids
                                                                                                                                                                                                                                                                    Human, methylated gene; methylation; breast cancer; marker; WT-1;
cell proliferative disorder; TMIST; HOXA5; NES-1; RARbeta; cyclin D2;
retinoic acid receptor beta; oestrogen receptor; Wilms' tumour;
14.3.3 sigma; HIN-1; RASSF1A; tumour suppressor gene; hypermethylation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sacchi N, Davidson N, Fackler MJ;
                                                                                                                                                                                                                   Retinoic acid receptor beta promoter methylation specific primer #4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match

0.9%; Score 15; DB 1; Length 23;
Best Local Similarity 78.3%; Pred. No. 7.1e+02;
Matches 18; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 23 BP; 8 A; 6 C; 0 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UYJO ) UNIV JOHNS HOPKINS SCHOOL MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1681 AACTACATCTTCCCTGCTTACTC 1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATTACATTTTCCAAACTTACTC 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Fig 3B; 115pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dooley WC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABT06660 standard; DNA; 23 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-JAN-2002; 2002WO-US002455.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-JAN-2001; 2001US-00771357.
                                                                      ABT06518 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    isolated from the subject
                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sukumar S, Evron E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-599803/64
                                                                                                                                                                                                                                                                                                                                                                                      PCR; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200259347-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                       Unidentified
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Gaps

0;

ABT06660;

SAXAX

RESULT 529

ð g ABT06660

Length 23; Indels Uhal BD;

Homo sapiens.

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The invention relates to a method for treating pulmonary fibrosis involving administering to a subject at risk of or suffering from pulmonary fibrosis, an amount of an antagonist of a remin-angiotensinal pulmonary system e.g., a capase enzyme inhibitor or an endonuclease inhibitor that inhibits pulmonary epithelial cell apoptosis, where the areagonist is a non-thiol angiotensin activating enzyme (ACE) inhibitor. The method is useful for treating a subject suffering from pulmonary fibrosis such as idiopathic pulmonary fibrosis, sarcoidosis, familial carbon pneumoconiosis, hypersensitivity pneumonitides, pulmonary fibrosis caused by an infectious agent, pulmonary fibrosis caused by an infectious agent, pulmonary fibrosis caused by inhalation of norganic dust, pulmonary fibrosis caused by inhalation of inorganic dust, pulmonary fibrosis caused by inhalation of carbon pulmonary fibrosis sace acrosols, chemical dusts, fumes or vapours, or drug-induced interstitial lung disease (ILD). The method is also useful in treating a contextitial lung disease (ILD). The method is also useful in treating as context in treating pulmonary fibrosis associated with collagence subject at risk of pulmonary fibrosis associated with collagence context of pulmonary fibrosis sadoners a reverse context of a subject as arrhythmia. This sequence represents a reverse context prediction.
                                                                                      Treating pulmonary fibrosis by administering antagonist of reninangiotensin-aldosterone system e.g. non-thiol angiotensin activating enzyme inhibitor, caspase enzyme or endonuclease inhibitor that inhibits apoptosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cellular proliferative disorder; breast cancer; methylation; predisposition; PCR; primer; CpG island; ss; human; retinoic acid receptor beta 2; RAR beta2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human retinoic acid receptor beta 2 (RAR beta2) primer #18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                     Example 5; SEQ ID NO 17; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    506 AGGCTACCTGGAGAGCTGACC 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 AGGCCAACCGCGAGAAGATGACC 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADM83762 standard; DNA; 23 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-JAN-2002; 2002US-00059579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-JAN-2001; 2001US-00771357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18; Conservative
                                                               WPI; 2003-810878/76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EVRON E.
DOOLEY W C.
SACCHI N.
DAVIDSON N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUKUMAR S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003138783-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-JUL-2003.
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(DOOL/)
(SACC/)
(DAVI/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 532
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                                                                                                                                                                                                                                                                                                                                                                         Diagnosing glaucoma in a sample comprises detecting altered expression of bone morphogenic proteins in sample from a cell or bodily fluid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence is an upstream primer for the PCR amplification of the human beta-actin gene. RT-PCR was used to examine the expression of bone morphogenic protein (BMP) family genes in human trabecular meshwork and optic nerve head tissues. The invention provides methods for diagnosing glaucoma based on altered expression of BMPs. Also provided are methods for treating glaucoma and for identifying agents suitable for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  caspase enzyme inhibitor; endonuclease inhibitor;
pulmonary epithelial cell apoptosis;
pulmonary epithelial cell apoptosis;
non-thiol angiotensin activating enzyme inhibitor;
non-thiol ACE inhibitor; sarcoidosis; silicosis; asbestosis;
pneumoconiosis; hyperensitivity pneumonitides;
drug-induced interstitial lung disease; ILD; vasculitides;
histlocytosis X; Goodpasture's syndrome; chronic eosinophilic pneumonia;
arrhythmia; RT-PCR; primer; ss; reverse transcriptase.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.9%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 7.18+02; cive 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; pulmonary fibrosis; renin-angiotensin-aldosterone;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 23 BP; 8 A; 7 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                              (ALCO-) ALCON INC.
(UXNT-) UNIV NORTH TEXAS HEALTH SCI CENT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         506 AGGCTACCTGGAGAAGCTGACC 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 AGGCCAACCGCGAGAAGATGACC 23
                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 25; 55pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADD41388 standard; DNA; 23 BP.
                                                                                                                     31-OCT-2002; 2002WO-US035251.
                                                                                                                                                                    31-OCT-2001; 2001US-0334852P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-0164052P.
2000US-00708742.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human DNA RT-PCR primer #11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18; Conservative
                                                                                                                                                                                                                                                                                Clark AF, Wordinger RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      treatment of glaucoma
                                                                                                                                                                                                                                                                                                                             WPI; 2003-559253/52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD.
                              WO2003055443-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-NOV-2000;
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                                                                           10-JUL-2003
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RESULT 531

ADD41388

Matches

8

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Gaps

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Length 23; Indels

Fackler MJ;

Davidson N,

Sacchi N,

Dooley WC,

(FACK/) FACKLER M J.

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The invention describes a method of diagnosing a cellular proliferative disorder of breast tissue in a subject comprising determining the state of methylation of one or more nucleic acid isolated from the subject, where the state of methylation of one or more nucleic acids is compared with the state of methylation of one or more nucleic acids is compared with the state of methylation of one or more nucleic acids from a subject on thaving the cellular proliferative disorder of breast tissue. Also described are: a method for determining a predisposition to a cellular proliferative disorder of breast tissue in a subject; a method of diagnosing a cellular proliferative disorder of breast tissue in a subject. The method is useful for diagnosing a cellular proliferative disorder of breast tissue in a subject. The method is useful for diagnosing a cellular proliferative disorder of breast tissue in a subject. This sequence represents a primer used in the analysis of the methylation state of the retinoic acid receptor beta 2 (RAR beta2) gene CpG islands in normal mammary epithelium, breast cancer cell lines and in primary
                                                                                  Diagnosing a cellular proliferative disorder of breast tissue in a subject comprises determining the state of methylation of one or more nucleic acid isolated from the subject.
                                                                                                                                                    Disclosure; SEQ ID NO 154; 59pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sukumar S, Evron E,
                           Evron E,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-851722/79
                                                          WPI; 2003-851722/79.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003138783-A1
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                              Sukumar S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADM83742;
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(DAVI/)
(FACK/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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ADM83742
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ö Gaps 0; 0.9%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 7.1e+02; ive 0; Mismatches 5; Indels Sequence 23 BP; 8 A; 6 C; 0 G; 9 T; 0 U; 0 Other; 1681 AACTACATCTTCCCTGCTTACTC 1703 AATTACATTITCCAAACTTACTC 23 78.3%; 18; Conservative Best Local Similarity

cellular proliferative disorder; breast cancer; methylation; predisposition; PCR; primer; CpG island; ss; human; twist. ADM83742 standard; DNA; 23 BP 28-JAN-2002; 2002US-00059579. 26-JAN-2001; 2001US-00771357. (first entry) Human twist primer #6 EVRON E.
DOOLEY W C.
SACCHI N. SUKUMAR S.

a more subject comprises determining the state of methylation of one or nucleic acid isolated from the subject.

SEQ ID NO 134; 59pp; English Claim 36;

The invention describes a method of diagnosing a cellular proliferative disorder of breast tissue in a subject comprising determining the state of methylation of one or more nucleic acid isolated from the subject, where the state of methylation of one or more nucleic acids is compared with the state of methylation of one or more nucleic acids from a subject mot having the cellular proliferative disorder of breast tissue. Also described are: a method for determining a predisposition to a cellular proliferative disorder of breast tissue in a subject; a method of aliagnosing a cellular proliferative disorder of breast tissue in a subject; and a kit for the detecting a cellular proliferative disorder of breast tissue in a subject. This sequence represents a primer used in the analysis of the methylation state of the twist gene CpG islands in normal mammary epithelium, breast state of the twist gene CpG islands in normal man cancer cell lines and in primary mammary tumours 

Sequence 23 BP; 8 A; 6 C; 0 G; 9 T; 0 U; 0 Other;

ö Gaps ., 0.9%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 7.1e+02; trive 0; Mismatches 5; Indels Conservative Query Match Best Local Similarity 18; Matches

1681 AACTACATCTTCCCTGCTTACTC 1703 23 1 AATTACATTTTCCAAACTTACTC ADP10659 standard; DNA; 23 12-AUG-2004 (first entry) ADP10659; RESULT 534 ADP10659/c g ò

transplant rejection; immune system; rheumatoid arthritis; lupus; inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer. Set 1 left PCR primer for marker probe #4.

Homo sapiens.

WO2004042346-A2

21-MAY-2004.

24-APR-2003; 2003WO-US012946.

24-APR-2002; 2002US-00131831. 20-DEC-2002; 2002US-00325899.

(EXPR-) EXPRESSION DIAGNOSTICS INC.

Morris M; Prentice J, Woodward R, Ly N, Fry K, Wohlgemuth J, Rosenberg S;

WPI; 2004-400724/37.

Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver, panoreas, panoreatic islet, lung, bone marrow or stem cell transplant rejection, in an individual, comprises detecting the expression level of genes

Claim 58; SEQ ID NO 668; 1762pp; English.

Fackler MJ;

Davidson N,

Sacchi N,

Dooley WC,

The present invention relates to diagnosing or monitoring transplant

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Score 14.8; DB 1; Length 18;
Pred. No. 6.2e+02;
0; Mismatches 2; Indels
Sequence 18 BP; 1 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
                                                  Query Match

Best Local Similarity 88.9%;
Matches 16; Conservative C
                                               Query Match
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0;

Gaps

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2; Indels

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AAA86681
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rejection, e.g. cardiac or kidney transplant rejection, in an individual comprises detecting the expression level of one or more genes. The methods, system and kits are useful in diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic islet, lung, bone marrow or stem cell transplant rejection, in an individual. The method is also useful in assessing the immune status of an individual. The method as also useful in diagnosing and monitoring diseases that involve the immune system, e.g. rheumatoid arthritis, lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or primer for a 50 mer oligonuclectide marker for diagnosis and monitoring of allograft rejection and other disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinases coth rethan cell-cycle dependent kinases CNI, PCNA and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme in resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDKI, PCNA and Cyclin B1.
                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                           ch 0.9%; Score 15; DB 1; Length 23; l Similarity 78.3%; Pred. No. 7.1e+02; l8; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   Cdc 2 kinase hammerhead ribozyme recognitoin site #113.
                                                                                                                                                                                  Sequence 23 BP; 7 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Robbins JM;
                                                                                                                                                                                                                                                               1390 CTCACCAAGCTGTTGCAGTTTGA 1412
                                                                                                                                                                                                                                                                                       23 CTGACCAAGATGTTGATGTTGGA 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US028772.
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                                                                                                                                                                                                                                                                                                                                                      AAA86682 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-412314/35.
                                                                                                                                                                                                                          Local Similarity
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                                                                                                                                                                                                           Query Match
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                                                                                                                                                                                                                                                                                                                                                                Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinases other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.8; DB 1; Length 18; 88.9%; Pred. No. 6.2e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                   Cdc 2 kinase hammerhead ribozyme recognitoin site #111.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 1 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 21; 109pp; English
1030 GCTGACTTTGGCCTGGCC 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1028 TGGCTGACTTTGGCCTGG 1045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Barber JR,
                                             1 GCTGATTTTGGCCTTGCC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US028772.
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                                                                                                                                                                  AAA86680 standard; DNA; 18
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                                                                                                                                                                                                                                                                04-DEC-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-DEC-2000 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tritz R, Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (IMMU-) IMMUSOL INC
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Matches 16; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-JUN-2000
                                                                                                                                                                                                                     AAA86680;
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Matches
                                                                                                                                                                                                                                                                                                RESULT 539
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                                                                                                                                                                                                                                                                                                        AAH61848
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                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                     The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAAB1315 to AAAB6717. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                             Human biallelic marker downstream amplification primer SEQ ID NO:11527.
                                                                                                                                 New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human genome; biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                      Score 14.8; DB 1; Length 18; Pred. No. 6.2e+02; 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                      Sequence 18 BP; 1 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                  Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chumakov I;
                                                                                                                                                                      Example 1; Page 21; 109pp; English.
                                                                                                                                                                                                                                                                                                                           GGCTGACTTTGGCCTGGC 1046
                                                                                                  Barber JR,
                                                                                                                                                                                                                                                                                                                                            GGCTGATTTTGGCCTTGC 18
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98US-0109732P.
                                                                                                                                                                                                                                                                                         0.8%;
                                             99WO-US028772
                                                               98US-0110954P
                                                                                                                                                                                                                                                                                                                                                                                         AAZ77171 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Blumenfeld M,
                                                                                                                                                                                                                                                       restenosis treatment
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                                                                                                  Tritz R, Welch PJ,
                                                                                                                   WPI; 2000-412314/35
                                                                                 (IMMO-) IMMOSOL INC
                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
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           WO200032765-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-APR-1998;
23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-APR-1999;
                                                               04-DEC-1998;
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                             08-JUN-2000
                                                                                                                                                                                                                                                                                                           16;
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                                                                                                                                                                                                                                                                                                                                                                                                           AAZ77171;
                                                                                                                                                                                                                                                                                                                                                                        RESULT 538
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AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ77440 represent amplification represents ror the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacions responses to and side effects from that maceutical agents acting on a disease as well as other treatment. N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3867, are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antiseoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
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Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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Pred. No. 6.2e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18 BP; 6 A; 7 C; 1 G; 4 T; 0 U; 0 Other;
                                                                                                                 Claim 9; Page 2688; 2745pp; English.
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                                                 map of the human genome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Robbins JM, Tritz R;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16;
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ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyolin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipacriatic, dermatological, cytostatic, antisebornheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH$57877 to AAH$62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    recognition site, target, ribozyme binding site, eye disease; vulnerary, proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloprotesinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermattis; actinic keratosis; squamous cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
                                                                              invention describes a method for treating a proliferative disease and scarring. The method involves administering a
metalloproteinases, growth factors and cell-cycle dependent kinases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.8; DB 1; Length 18; 88.9%; Pred. No. 6.2e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 1 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
                                      Disclosure; Page 385; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1030 GCTGACTTTGGCCTGGCC 1047
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                                                                                                     skin or eye
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproleinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin giseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keinded and hypertrophic or hypertrophic burn
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Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scar. Addistry to Addistance and hypertrophic or hypertrophic burn scar. Addistry to Addis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 14.8; DB 1; Length 18;
Pred. No. 6.2e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18 BP; 1 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               exemplification of the present invention
                                                                                                                                     Disclosure; Page 385; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1029 GGCTGACTTTGGCCTGGC 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAH61846 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%;
88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-OCT-2000; 2000WO-US029500.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-0161532P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 88.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tritz R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200130362-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-MAY-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
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Human;
cyclin
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                                                                                                                  in Skinn or eye disease and scarring. The meturo. Introvince disease and scarring. The meturo is tribozyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (11) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, or nucleic acid segment encoding (1). (1) can have antipsoriatic, ophthalmological, cytostatic, antiseborrheic, antidabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (11) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic rematurity and retinal detachment, and for treating and preventing pronice grarring such as keloid, adhesion and hypertrophic or hypertrophic burn
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0
                         proliferative skin or eye diseases and scarring, using ribozymes
                                                                                                present invention describes a method for treating a proliferative I or eye disease and scarring. The method involves administering a
                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                     that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              therapy; vaccine; rheumatoid arthritis; gene modulation; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.8; DB 1; Length 18; 38.9%; Pred. No. 6.2e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                 scarring such as keloid, adhesion and hypertrophic or hype
scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human guanylate binding protein reverse primer #SEQ ID 14.
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                                                                                                                                                                                                                                                                                                                           exemplification of the present invention
                                                                          Disclosure; Page 385; 408pp; English.
                                                                                                              skin or eye disease and scarring.
                                                                                                                                                                                                                                                                                                                                                                                                                          1028 IGGCIGACTITGGCCIGG 1045
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGCTGATTTTGGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                   88.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-513754/48
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NADLER S G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BOWEN M.
NEUBAUER M.
  WPI; 2001-300427/31
                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                   16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADE34621;
                           Treating
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(CARM/) (
(NADL/) 1
                                                                                                                                                                                                                                                                                                                                                                          Query Match
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to 50
cells or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention describes a compound (I) of up to 50 nucleobases in length, which inhibits the expression of Cyclin D2. (I) is useful for inhibiting the expression of Cyclin D2 in cells or tissues in vitro. (I) is thus useful for treating disease associated with Cyclin D2 expression. (I) is useful for diagnostics, therapeutics, prophylaxis and as research reagents and kits. This sequence represents human cyclin D2 inhibition associated oligonucleotide
                                                                                                                                                                                                                                                   The invention relates to an assay for identifying a compound that modulates the activity of a gene or protein associated with rheumatoid arthritis. The method of the invention comprises providing a cell expressing a gene or protein associated with rheumatcoid arthritis, contacting the cell with a test compound, and determining whether the test compound modulates the activity of the gene or protein. The method of the invention is useful for preparing a composition for treating rheumatcoid arthritis. The current sequence represents a PCR primer used in the isolation of rheumatoid arthritis associated genes.
                                           arthritis-associated gene or protein by determining whether the test compound modulates the activity of the gene or protein expressed in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antisense inhibition of human cyclin D2 related oligonucleotide #23.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel antisense compound useful for treating diseases associated
Identifying a compound that modulates the activity of rheumatoid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
0.8%; Score 14.8; DB 1; Length 18;
Best Local Similarity 88.9%; Pred. No. 6.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diagnostic; therapeutic; prophylaxis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18 BP; 5 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
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                                                                                                                                                                                                Disclosure; Page 24; 170pp; English.
                                                                                                                         cell contacted with the compound.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1207 TTTCCGGGCTCCACGGTG 1224
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cyclin D2; diagno
2 inhibition; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-361492/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tissues in vitro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JS6492173-B1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18
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Human LIPIN3 exon1 PCR primer seqid 16.

01-JUL-2004 (first entry)

BP.

ADO17024 standard; DNA; 18

RESULT 545 ADO17024/c AD017024;

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                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; cardiovascular associated gene; allelic variation; atherosclerosis; ischemia; reperfusion; hypertension; restenosis; arterial inflammation; myocardial infarction; stroke; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates an isolated polynucleotide (I) encoded by a cardiovascular associated (CA) gene, having allelic variation contained in a functional surrounding like full length cDNA for CA gene polypeptide, and with or without the CA gene promoter sequence. (I) is a polynucleotide comprising single nucleotide polymorphisms predicting cardiovascular disease. The polynucleotides are useful for assessing predisposition or susceptibility to a cardiovascular disease, e.g. atherosclerosis, isohemia/reperfusion, hypertension, restenosis, arterial inflammation, myocardial infarction, and stroke. These may also be used to predict personal medication schemes omitting adverse drug reactions,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or as probes for detecting genetic polymorphisms and as templates for the recombinant production of normal or variant peptides/polypeptides encoded by the genes. This sequence corresponds to a PCR primer to amplify one of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated polynucleotides comprising single nucleotide polymorphisms of the cardiovascular gene, useful for assessing predisposition or susceptibility to a cardiovascular disease, e.g. atherosclerosis, restenosis or stroke.
                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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/ Match 0.8%; Score 14.8; DB 1; Length 18; Local Similarity 88.9%; Pred. No. 6.2e+02; les 16; Conservative 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                             SNP-containing cardiovascular associated gene primer #328.
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                                                                        992 AGAACCTGCTCATCAACG 1009
                                                                                                                                                                                                      BP.
                                                                                                         18 AGAACCTGCTCACCATCG 1
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                                                                                                                                                                                                  ADM92997 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the genes of the invention.
                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 88.9
nes 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Schwers S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-577532/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (FARB ) BAYER AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003057911-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                         03-JUN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Stropp U,
                                                                                                                                                                                                                                       ADM92997;
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
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Matches
                     Best Loca
Matches
                                                                                                                                                                RESULT 544
                                                                                                                                                                                   ADM9299'
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1258 GGAACCCCAACTGAGGAG 1275

GGAAGGCCAACTGAGGAG 18

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The invention describes an isolated polypeptide (I) comprising a caids as given in the specification or a region consisting of 5 or more contiguous amino acids, where the region includes amino acid of 634 of (S1). Also described are: an isolated polymuclectide (II) comprising a fully defined sequence (S2) of 2405 base pair as given in the specification, or its complement, a polymuclectide (II) comprising a fully defined sequence (S2) of 2405 base pair as given in the specification, or its complement, a polymuclectide (II) comprising of S2); vector, preferably an expression vector (III) comprising (II); a comprising nuclectide 1904 of (S2); vector, preferably an expression vector (III) comprising (II); a comprising (II); a a liping polymuclectide in a test sample; detecting obesity or obesity or obesity or a region of a LIPIN3 polymuclectide in a test sample; detecting obesity or a region of (V) or (VI), where the region is 10 or more (VI), or a region of (V) or (VI), where the region is 10 or more concludes in length; screening (M2) for agents that reduce the captression of a LIPIN3 correction or (VI), and test cell sample; antibodies that specifically bind to (I); a recombinant cell comprising a recombinantly modified (II) and a rest cell sample; antibodies that specifically conforming two or more (II); and identifying an alteration in a transportation of a respective obesity or involves detecting (I) in a destry related with obesity or an obesity related with obesity or no obesity related with obesity molecting obesity protein, nucleic acid, and small conformation in a represents a primer used to identify in conformation or involves detecting (I). In the nucleocated with a primer used to identify or anolyment is nearly expensed to a primer used to identify or anolyment is nearly or or anone or presents a primer used to identify or anolyment of a primer used to identify or a primer used to identify or a primer used to identify or a primer used t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       single nucleotide polymorphisms in the human Lipin3 gene that may be
                                                                                                                                           LIPIN3; obesity; obesity-related disorder; differential expression; polynucleotide polymorphism; adipocyte; human; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel isolated LIPIN3 polypeptide, useful for diagnosing diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.8%; Score 14.8; DB 1; Length 18; 88.9%; Pred. No. 6.2e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18 BP; 4 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 5; SEQ ID NO 15; 58pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1016 GAGAGCTCAAGCTGGCTG 1033
                                                                                                                                                                                                                                                                                                                                                                26-JUL-2002; 2002US-00206618.
                                                                                                                                                                                                                                                                                                                                                                                                                26-JUL-2002; 2002US-00206618
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                associated with obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-122019/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                (WARD/) WARDEN C H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                                                                                                                                                                                                                                                US2004018497-A1.
                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                  29-JAN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Warden CH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
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AAA82999

RESULT 546

AAA82999

Mammalia

Tritz R,

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The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinase CDK1, PCNA and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme recognition sites are given in inhibiting restenosis by introduction of the invention is useful for ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 14.8; DB 1; Length 19;
Pred. No. 6.5e+02;
); Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                   Robbins JM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 74; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cyclin D1 ribozyme binding site #33.
                                                                                                                                                                                                                                         Disclosure; Page 49; 109pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Barber JR,
                                                                                                     Barber JR,
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99WO-US028772
                                 98US-0110954P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAGCTGCTCCGTGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                               Cuery Match
Guery Local Similarity 88.30,
Best Local Similarity 88.30,
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA84266 standard; DNA; 19
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                                                                                                     Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (IMMN-) IMMNSOF INC
                                                                                                                                       WPI; 2000-412314/35
                                                                   (IMMO-) IMMOSOL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hairpin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200032765-A2.
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06-DEC-1999;
                                   04-DEC-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mammalia
                                                                                                     Tritz R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tritz R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA84266
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
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                                                                                                                                                                                             SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAAB83415 to AAAB8787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endomoclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cleaves
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleave: RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                           Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis;
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Pred. No. 6.5e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Robbins JM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 55; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1030 GCTGACTTTGGCCTGGCC 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                     Barber JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13
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                                                                                                                                                         cdk6 ribozyme binding site #59
                                                     AAA82999 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.8%;
88.9%;
                                                                                                                                                                                                                                                                                                                               99WO-US028772
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-412314/35
                                                                                                                                                                                                                                                                                                                                                                                                   (IMMU-) IMMUSOL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                     Welch PJ,
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Query Match Best Local &

Matches

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RESULT 547

AAA82619;

AAAAB2611 AAX XXX XXX AC AA3 DDT 04 XXX XXX XXX Man XXX Man

The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.

WO200032765-A2

08-JJN-2000

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteanes (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (1) can have antipsoriatic, antisickling, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis,
Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cell-cycle dependent kinase cdk6 ribozyme binding site SEQ ID NO:585.
                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                        0;
                                                                                                                                                                  Match 0.8%; Score 14.8; DB 1; Length 19; Local Similarity 88.9%; Pred. No. 6.5e+02; les 16; Conservative 0; Mismatches 2: Indels
                                                                                                                                   G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                             272 GTGCTGCTCCTGGGGAAC 289
                                                                                                                                                                                                                                                                                                        19
                                                                                                                                                                                                                                                                                                                                                                                                              AAH58161 standard; DNA; 19 BP.
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                                                                                                                                 Sequence 19 BP; 3 A; 5 C; 7
                                                                                                                                                                                                                                                                                                        2 GAGCTGCTCCTGGTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                         restenosis treatment
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                                                                                                                                                                           Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretimopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used
                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                          Score 14.8; DB 1; Length 19; Pred. No. 6.5e+02;
                                                                                                                                                                                                                                                2; Indels
                                                                                                                                                                    Sequence 19 BP; 1 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cyclin D1 ribozyme binding site SEQ ID NO:1852.
                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                            exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 206; 408pp; English.
                                                                                                                                                                                                                                                                                        1030 GCTGACTTTGGCCTGGCC 1047
                                                                                                                                                                                                                                                                                                                                2 GCTGACTTCGGCCTTGCC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                          0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                   AAH59428 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                           Local Similarity 88.9 es 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-300427/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200130362-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Robbins JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-MAY-2001.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAH59428;
                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                           RESULT 550
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ADF31689
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                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, ribozyme therapy, hairpin ribozyme, hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; proriferatis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MWP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
and (II) are useful for treating proliferative skin
                      diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or sebortheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, virreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:205
                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                             Score 14.8; DB 1; Length 19;
Fred. No. 6.5e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                               Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                    exemplification of the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                 272 GIGCIGCICCIGGGAAC 289
                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGCTGCTCCTGGTGAAC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAH57781 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                             0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sickle cell retinopathy; ss
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     therapy. (I)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH57781;
                                                                                                                                                                                                                                                                                                                                                   Matches
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ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (11) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic kerative skin also be used for treating proliferative eye diseases such as diabetic retinopathy, virteoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to short interfering nucleic acids (siNA) which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RNA interference; short interfering nucleic acid; siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     pharmacogenomics, gene function analysis, gene mapping, cancer, proliferative disease, restenosis, polycystic kidney disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Inflammatory disease; allergic disease; autoimmune disease; transplant rejection; orosatatic; vasotropic; nephrotropic; antiinflammatory; antiallergic; immunosuppressive; human; insulin-like growth factor I receptor; IGF-1R; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.8; DB 1; Length 19; 88.9%; Pred. No. 6.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human IGF-1R sinA lower strand, SEQ ID NO:354.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          short interfering nucleic acid, useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 3; SEQ ID NO 354; 147pp; English.
                                                                                                                                                                                                                                                                                                                                 exemplification of the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    927 CCAGCTGCTCCGTGGCCT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ccadcificircaggecer 18
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2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88.98;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADF31689 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.8
Best Local Similarity 88.9
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
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05-SEP-2002;
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Compute thousable and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide.

Compute Specifically, the siNAs include short interfering RNA (siRNA), doublestranded RNA, micro-RNA (mirNA) modified, can contain (shrNA). The siNAs include short interfering RNA (siRNA), doublestranded RNA, micro-RNA (mirNA) modified, can contain (shrNA). The siNAs can be unmodified or chemically modified, can contain (shrNA) and vectories, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA, conjugates and/or complexes of siNA, and vectors that express siNA. The siNAs are used to modulate expression of the IGF-IR gene in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the cancer and other proliferative diseases (e.g., restement of a variety of conditions. They may be used for treating cancer and other proliferative diseases (e.g., restement) cancer and other proliferative diseases (e.g., attoimmuno cancer also useful for drug carcening, disease), inflammatcory and/or allergic diseases, autoimmuno cancer diseases, autoimmuno cancer described in an validation, genetic engineering, pharmacogenomics, studying gene function, and gene care mapping (e.g., of single nucleotide polymorphisms). The present sequence context the lower strand of a human IGF-IR-targeted double-stranded context.
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downregulate expression of the human insulin-like growth factor 1 receptor (IGF-1R) gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RNA interference; short interfering nucleic acid; siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; micro-RNA; short hairpin RNA; shRNA; expression modulation; gene therapy; pharmacogenomic; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; cancer; proliferative disease; restenosis; polycystic kidney disease; inflammatory disease; allergic disease; autoimmune disease; transplant rejection; cytostatic; vasotropic; nephrotropic; antiinflammatory; antiallergic; immunosuppressive; human; insulin-like growth factor 1 receptor; IGF-IR; target sequence; ss.
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Pred. No. 6.5e+02;
6; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19 BP; 5 A; 5 C; 2 G; 0 T; 7 U; 0 Other;
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06-UIN-2002; 2002US-03867B2P.
29-AUG-2002; 2002US-04067B4P.
05-SEP-2002; 2002US-0409293P.
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Best Local Similarity 55.6%;
Matches 10; Conservative (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-FEB-2004
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Can be unmodalited or comencally modulised, can contain a decyribomucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits to for the in vitro or in vivo dealivery of sinA, conjugates and/or complexes of sinA, and vectors that express sinA. The sinAs are used to modulate expression of the IGF-IR gene in cells, tissue explants or organisms of e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for treating cancer and other proliferative diseases (e.g., restenosis and polycystic diseases), inflammatory and/or allergic diseases, autoimmune diseases in inflammatory and/or allergic diseases, autoimmune caseming, diagnosis, therapeutic target identification and validation, conspining (e.g., of single nucleotide polymorphisms). The present sequence represents the upper strand of a human IGF-IR-targeted double-stranded case.
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                                                                                                nucleic acid, useful e.g. for treatment and downregulates expression of the insulin-like growth
                                                                                                                                                                                                             The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human insulin-like growth factor 1 receptor (IGF-IR) gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an artisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA), doublestranded RNA, micro-RNA (miRNA) and short hairpin RNA (shRNA). The siNAs can be unmodified or chemically modified, can contain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  short interfering nucleic acid; siNA; breakpoint cluster region; vabl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ERG2; v-ets erythroblastosis virus E26 oncogene like (avian).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.8; DB 1; Length 19;
88.9%; Pred. No. 6.5e+02;
cive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seguence 19 BP; 7 A; 2 C; 5 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human ERG2-targeted siRNA - SEQ ID 1309.
                                                                                                                                                                             Example 3; SEQ ID NO 77; 147pp; English.
                    B)
                  Chowrira
                                                                                                New short interfering nucleic acid,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1681 AACTACATCTTCCCTGCT 1698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -
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2002US-0386782P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18 AAGTACATTTTCCCTGCT
                  Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADF85015 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-FEB-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16; Conservative
                                                                                                                                       factor-1 receptor gene.
                                                                                                                     diagnosis of cancer,
                                                        WPI; 2003-721691/68.
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11-MAR-2002;
06-JUN-2002;
                  Mcswiggen J,
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B.

Chowrira

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(RIBO-) RIBOZYME PHARM INC.
                           Beigelman L,
                                                 WPI; 2003-679889/64
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                              Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-JUN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                         26-AUG-2004
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                                                                                                                                                                                                                                                                                                           556
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          subject.
                                                                                                                                                                                                                                                                                                                                                            RESULT 556
                                                                                                                                                                                                                                                                                                                                                                       AD079637
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                                                                                                                                                                                         The invention relates to a novel double-stranded short interfering nucleic acid (siNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of the human BKG2 (v-ets erythroblastosis virus E26 oncogene like (avian))-targeted siRNA of the invention.
                                                                                                                                  New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ERG2; v-ets erythroblastosis virus E26 oncogene like (avian).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          interfering nucleic acid; siNA; breakpoint cluster region;
                                                                                                                                                                                                                                                                                                                                                     ;
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                                                                                                                                                                                                                                                                                                                                0.8%; Score 14.8; DB 1; Length 19; 72.2%; Pred. No. 6.5e+02;
                                                                                                                                                                                                                                                                                                                                                   2; Indels
                                                                                                                                                                                                                                                                                                             Sequence 19 BP; 1 A; 10 C; 5 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                            Example 7; SEQ ID NO 1309; 197pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human ERG2-targeted siRNA - SEQ ID 1485.
                                                                                            Chowrira B;
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2002US-0408378P.
2002US-0409293P.
2003US-0439922P.
2003US-0440129P.
                   2002US-0408378P.
2002US-0409293P.
2003US-0439922P.
2003US-0440129P.
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2002US-0386782P.
2002US-0404039P.
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 2002US-0404039P.
2002US-0406784P.
                                                                                                                                                                                                                                                                                                                                                                         CTCAGCCGCCGCCTCCGT
                                                                                            Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                               ADF85191 standard; RNA; 19
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                                                                        (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                WPI; 2003-679889/64.
                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2003070972-A2.
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29-AUG-2002;
05-SEP-2002;
09-SEP-2002;
14-JAN-2003;
15-JAN-2003;
15-AUG-2002; 29-AUG-2002; 20-5-SEP-2002; 209-SEP-2002; 14-JAN-2003; 215-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-FEB-2002;
                                                                                             Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-FEB-2004
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                                                                                                                                                                                                                                                                                                                                                                          556
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Best Local S
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v-abl
                                                                                                                                                                                                                                                                                                                                                                                                                                       ADF85191/c
                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 555
                                                                                                                                                                                                                                                                                                                                                      Matches
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The invention relates to a novel double-stranded short interfering nucleic acid (siNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siNNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of the human ERG2 (v-ets erythroblastosis virus E26 oncogene like (avian))-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Identifying a subject at risk of breast cancer by detecting the presence of polymorphic variations in the DLG1, KIAA0783, DPF3 or CENPC1 regions which are associated with breast cancer in a nucleic acid sample from a
New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cytostatic; Gene therapy; breast cancer; human; DLG1; KIAA0783; DPF3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.8; DB 1; Length 19;
88.9%; Pred. No. 6.5e+02;
tive 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 3 A; 5 C; 10 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                   Example 7; SEQ ID NO 1485; 197pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         targeted siRNA of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Н
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24-JUL-2003; 2003US-0490234P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KIAA0783 extend primer #29.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 88.5
Matches 16; Conservative
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The present invention relates to a method for identifying a subject at risk of breast cancer. The method comprising detecting the presence or absence of one or more polymorphic variations associated with breast cancer in a nucleic acid sample from a subject. The nucleic acid sample comprises the DiG1 region (ADO79402), KIAA0783 region (ADO79403), DPF3 region (ADO79404) or CENPC1 region (ADO79404), DPF3 has been mapped to chromosomal position 7021.3. The KIAA0783 protein is a conduction of the constraint of the control of the conduction of t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           trials. The present sequence was used in an example from the invention
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0.8%; Score 14.8; DB 1; Length 19; 88.9%; Pred. No. 6.5e+02; live 0; Mismatches 2; Indels 663 CAAAGGCAAAAGCAAGCT 680 CAAAAGCAAAAGTAAGCT 16; Conservative Local Similarity Query Match Best Loca Matches

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Gaps

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AAV12449 standard; DNA; 20 BP 14-MAY-1998 AAV12449; RESULT 557 AAV12449/c

(first entry)

Growth hormone receptor PCR primer P3.

Growth hormone receptor; GHR: human; insulin like growth factor-1; partial growth hormone insensitivity syndrome; IGF-1; short stature; PCR primer; ss.

Synthetic

Homo sapiens.

WO9741887-A1

97WO-US006652. 18-APR-1997;

13-NOV-1997

96US-00643212. 03-MAY-1996;

(GETH ) GENENTECH INC

Goddard A; Gesundheit N, Carlsson LMS, Attie KM,

Disclosure; Page 7; 133pp; English

This is a forward PCR primer designed for use with a reverse primer (see AAVS2682) in the PCR amplification of exon 8 and the flanking introns (see AAVS26565 of the human hepatocyte nuclear factor-4 alpha (HNF-4 alpha) gene (see AAVS2687). Mutations of the HNF-4 alpha gene have been identified by amplifying (see AAVS2665-86) and sequencing the appropriate exon. The invention concerns the identification of genes responsible for

Example 3; Page 112; 363pp; English.

Treatment of partial growth hormone insensitivity syndrome - with growth hormone or insulin-like growth factor. WPI; 1997-558693/51 

The present sequence represents a PCR primer for growth hormone receptor (GRR) used in an example of the present invention. The present invention describes new methods for increasing the growth rate of a human patient having partial growth hormone insensitivity syndrome (GHIS) or a non-Growth Hormone (GH)-deficient short stature but not Laron Syndrome; the patient has a height of at least -2 standard deviations (GD) below normal for age and sex, has a serum level of high-affinity GH-binding protein of at least 2 SD below normal, has serum levels of insulin-like growth at least 2 SD below normal mean levels and has a mean level or maximum stimulated serum level of GH that is at least normal, and growth rate is increased by administering an effective amount of GH and/or IGF-I. The methods are used to treat people with short stature including familial stature. The patient especially has a heterologous intra- or stature. Stature of Hr eceptor gene defect .. 0 Isolated nucleic acid encoding hepatocyte nuclear factor 1-alpha and beta - useful for detecting susceptibility for non-insulin dependent diabetes, especially maturity-onset diabetes of the young. Gaps transcription factor; maturity onset diabetes of the young; TCF14; diabetes; NIDDM; diagnosis; therapy; PCR; primer; ss. Hepatocyte nuclear factor 4 alpha gene exon 8 forward PCR primer. . 0 Hepatocyte nuclear factor 4 alpha; HNF-4 alpha; MODY1; human; Menzel Length 20; Query Match 0.8%; Score 14.8; DB 1; Length 2
Best Local Similarity 88.9%; Pred. No. 6.8e+02;
Matches 16; Conservative 0; Mismatches 2; Indels Bell GI, Yamagata K, Oda N, Kaisaki PJ, Furuta H, Horikawa Y; Sequence 20 BP; 8 A; 1 C; 7 G; 4 T; 0 U; 0 Other; 1237 CACTTCATCTTCCGTATC 1254 N AAV52681 standard; DNA; 20 BP. 96US-0025719P. 96US-0028056P. 96US-0029679P. 97WO-US016037. 19 CACTICATATICCTIATC 21-DEC-1998 (first entry) (ARCH-) ARCH DEV CORP WPI; 1998-271667/24. Homo sapiens. 10-SEP-1997; W09811254-A1 10-SEP-1996; 02-OCT-1996; 30-OCT-1996; 19-MAR-1998. Synthetic AAV52681; à d THE STATE OF STATES OF STA 856 AAGGACCTGAAGCAGTAC 873

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AAX23550/
                                                                                                 RESULT
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non-insulin dependent diabetes mellitus (NIDDM) for use in diagnostics and therapeutics. It demonstrates that the MODY1 (maturity-onset diabetes of the young) locus is the HNF-4 alpha gene. Analysis of mutations in the HNF-4 alpha gene can be diagnostic for diabetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Vaccine; eye disease; conventional trachoma; nonendemic trachoma; paratrachoma; inclusion conjunctivits; genital disease; peribepatitis; nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer; bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR primers AAZ01426-Z06209 were used to amplify open reading frames (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AAY36754-Y37949) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases uch as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal uretritis, epidymitis, cervicitis, salphngitis, perimpgatitis, bartholinitis; pneumopathy in breast feeding infants; and venereal lymphogranulomatosis. The polypeptides of the invention may be of use in treating these
                                                                                                                                                                              Gaps
                                                                                                                                                                              0
                                                                                                                                   0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.8e+02;
iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.8e+02;
iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCR primer used to amplify an ORF of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seguence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                   Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genome sequence of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 1476; 1755pp; English.
                                                                                                                                                                                                                  CTTGTGGCACTCAAGGAG 708
                                                                                                                                                                                                                                                         CTTGTGTCACACAAGGAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97FR-00016034.
98US-0107077P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-IB001939.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97FR-00015041
                                                                                                                                                                                                                                                                                                                                                          AAZ01841 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                              16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-371125/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-NOV-1997;
17-DEC-1997;
04-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        W09928475-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                   07-0CT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-JUN-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                 AAZ01841;
                                                                                                                                                                                                                    691
                                                                                                                                                                                                                                                         18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                diseases
                                                                                                                                                                                                                                                                                                                    RESULT 559
                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                        AAZ0184
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This sequence represents a PCR primer that can be used in the method of the invention. The method is for genetic diagnosis using human micochondrial DNA where there is at least one base replacement from among the following five replacements: the 3010th base is changed from guanine to adenine; the 4883rd base from cytosine to thymine; the 5178th base from cytosine to thymine; the 5178th base the 14668th base from cytosine to thymine; and the 14668th base from cytosine to thymine; and diagnosing the probability of contracting adult diseases. A confirmation of base replacement can give a diagnosis of the level of probability of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genetic diagnosis using human mitochondrial DNA - comprises detecting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Deletion sequence oligonucleotide; sensor array; eukaryotic pathogen; probe; cellular adhesion modulator; cellular proliferation modulator; human retrovirus; non-human retrovirus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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88.9%; Pred. No. 6.8e+02;
ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                            primer; human; mitochondrial DNA; genetic diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 2 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                               PCR primer H11791 for mitochondrial DNA analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Deletion sequence oligonucleotide 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 6; 15pp; Japanese.
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20
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                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                        adult disease contraction; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             contraction of adult diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97JP-00279127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97JP-00279127
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AAGGACCTGAAGAAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  50
                                                                                                                AAX79768 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX23550 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-320841/27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   base replacements.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (TANA/) TANAKA M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                  JP11113597-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-OCT-1997;
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Local S...
16;
                                                                                                                                                                                                       17-AUG-1999
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                                                                                                                                                                                                                                                                                                                                                              Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX23550;
                                                                                                                                                             AAX79768;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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Gaps

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Conservative

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This invention describes a novel composition comprising a number of sensor arrays, where each array comprises a unique probe oligonucleotide, sensor arrays, where each array comprises a unique probe oligonucleotide.

"In the sensor is the reverse complement of part of anique target coligonucleotide present in a mixture of target deletion sequence oligonucleotides. The compositions form a method for characterizing a sample of target deletion oligonucleotides which are labelled and hybridize with the probe oligonucleotides of the sensor arrays. Such oligonucleotides and their targets are represented in AAX23548-X23709. Compositions that are useful for modulating cellular adhesion or proliferation, and being active against a eukaryotic pathogen, a human composition influence wires. Epstein-Barr virus, Respiratory Syncytial Virus or cytomegalovirus (CMV). The compositions enable characterization of deletion sequence oligonucleotides having related, but different nucleobase sequences, and quantification of different compositions sequence ("target") oligonucleotides in a mixture. Also, if the specificity of the oligonucleotide's nucleobase sequence ("target") list reverse complement is not modified, the method may be performed using
                                                                                                                                                                                                                                                                                                                                                                    New compositions comprising sensor arrays made up of unique probe oligonucleotides - useful for characterizing a sample of target deletion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 90; 163pp; English.
                                                                                                                                                                 98WO-US018084.
                                                                                                                                                                                                       97US-00923771.
                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oligodeoxynucleotides
                                                                                                                                                                                                                                                                                     Chen D, Srivatsa GS;
                                                                                                                                                                                                                                                                                                                            WPI; 1999-205198/17
                                                                                                                                                                                                                                                                                                                                                                                                              oligonucleotides.
HIV; primer; ss
                                                                                                                                                                                                       02-SEP-1997;
                                                                                WO9911820-A1
                                                                                                                                                               01-SEP-1998;
                                                                                                                      1-MAR-1999
                                          Synthetic.
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PCR primers AAZ36935-36 were used to amplify an EcoRI/BrsGl fragment containing 5' cistron of the gag gene of Moloney murine leukemia virus (MoMLV). The amplified fragment was used to construct the retrovirus particles of the invention. All the genetic elements needed to construct these retroviral particle are incorporated into one or more recombinant adenoviruses that are defective for at least all or part of the B1 and B4 regions. The retroviral particles formed are defective, but infectious, and transfer nucleic acid very efficiently. The amplified products are used for in vitro or ex vivo production of retroviral particles and for preparation of a product intended for production of retroviral particles

in vivo. The particles produced are used to transfer nucleic acid into cells, to create animal models of disease which are useful for studying gene regulation and bicavailability. The retroviral particles are also useful for gene therapy of neurodegeneration, tumours, autoimmune disease, infection or many other disorders and for genetic vaccination

Sequence 20 BP; 3 A; 2 C; 12 G; 3 T; 0 U; 0 Other;

Producing retroviral particles from recombinant, defective adenoviruses,

useful for gene therapy or vaccination.

Example 1; Page 23; 73pp; French.

Salzmann J;

Klatzmann D,

Perricaudet M,

Yeh P,

Torrent C,

WPI; 2000-072443/06

RHON ) RHONE-POULENC RORER SA

GENO-) GENOPOIETIC SARL

99WO-FR001184. 98FR-00006258.

L8-MAY-1999; L8-MAY-1998;

W09960144-A1

25-NOV-1999.

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modulation; signal transducer and activator of transcription;
DNA-binding protein; signal transduction; inhibition; apoptosis;
inflammatory disease; cancer; antinflammatory; antirheumatic;
cytostatic; immunostimulatory; rheumatoid arthritis; leukaemia; myeloma;
melanoma; lymphoma; diagnosis; ss.
                            Gaps
                                                                                                                                                                                                                                   Human STAT3 phosphorothioate antisense oligonucleotide SEQ ID NO:27.
                                                                                                                                                                                                                                                             Human; mouse; STAT3; phosphorothioate; antisense oligonucleotide;
                            ·
0
0.8%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 6.8e+02; ative 0; Mismatches 2; Indels
                                                      571
                                                                                 Н
                                                      554 CCCTCAGCCGCCGCTCC
                                                                                18 cccraagccrccccrcc
                                                                                                                                                  AAC93176 standard; DNA; 20
                                                                                                                                                                                                       15-FEB-2001 (first entry)
                            Conservative
            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                        WO200061602-A1.
                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                   19-OCT-2000.
                           16;
                                                                                                                                                                             AAC93176;
Query Match
                                                                                                                         RESULT 563
                           Matches
                                                                                                                                         AAC93176
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Gaps

0;

Score 14.8; DB 1; Length 20; Pred. No. 6.8e+02; 0; Mismatches 2; Indels

0.8%; 88.9%;

Query Match 0.8 Best Local Similarity 88.9 Matches 16; Conservative

132 GATGAAGAAGATCAAACG 149

à

19 GAAGAAGAGAGCAAACG 2

06-APR-2000; 2000WO-US009054.

region;

Gag gene; MLV; retrovirus particle; recombinant adenovirus; El regi E4 region; nucleic acid transfer; animal model; gene regulation; bioavailability; gene therapy; neurodegeneration; tumour; autoimmune disease; infection; genetic vaccination; PCR primer; ss.

Moloney murine leukemia virus

Synthetic

PCR primer used to amplify the 5' cistron of the gag gene of MOMLV.

(first entry)

13-MAR-2000

AAZ36936;

BP.

AAZ36936 standard; DNA; 20

RESULT 562 AAZ36936/c

; 0

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The present invention describes an antisense compound (I), 8 to 30

cucleobases in length, that is targeted to a nucleic acid molecule
cucleobases in length, that is targeted to a nucleic acid molecule
cucleobases in length, that is targeted to a nucleic acid molecule
cucleobases in length, that is targeted to a nucleic acid molecule
curinch inhibits the expression of it. (I) has antiinflammatory,
cantinhibiting the expression of STAT3 in cells or tissues, treating an
animal having a disease or condition associated with STAT3 or a human
control and inducing apoptosis in a cell. Diseases or conditions that are treated
and inducing apoptosis in a cell. Diseases or condition in apoptosis,
and inducing apoptosis in a cell. Diseases or conditions that are treated
and/or neck, leukaemia, myeloma, melanoma or lymphoma. (I) can also be
cused for diagnostic methods in detecting and determining the role of
styrm3 in various cell functions, physiological processes and conditions
and for diagnosting the conditions associated with expression of STAT3.

(I) can be used alone or with other drugs as an immunostimulator. (I) is
used in sandwich and colourimetric assays, involving enzyme conjugation
and radiolabeling and is used in diagnostic kite. AAC93150 encodes human
STAT3 and AAC93231 encodes mouse STAT3 as given in the exemplification of
the present involventy and alone.

COLOURING AND AC93151 to AAC93120 to AAC93150

COLOURING AND AC93151 to AAC93130 and AAC93231 to AAC93150
                                                                                                                                                          New antisense compound for inhibiting the expression of signal transducer and activator of transcription 3 (STAT3) in cells or tissues and treating diseases or condition associated with STAT3, such as rheumatoid arthritis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 represent STAT3 phosphorothicate antisense oligonucleotides, and AAC93300 represents a mismatch control oligonucleotide which are used in example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Agrobacterium tumefaciens NT1130; 1,5-anhydroglucitol dehydrogenase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1,5-anhydroglucitol dehydrogenase PCR primer SEQ ID NO:24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1,5-AGDH; detection; diabetes; PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                   Example 2; Page 46; 104pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DAIL-) DAIICHI KAKAGU YAKUHIN KK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             922 CIGITCCAGCTGCTCGT 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19
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99US-00288461
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                from the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                        (ISIS-) ISIS PHARM INC
                                                                                                                        WPI; 2000-619223/59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JP2000316570-A
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08-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16;
                                                                                                                                                                                                                               and cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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                                         A gene encoding 1,5-anhydroglucitol dehydrogenase, a recombinant vector containing the gene, a transformant containing the recombinant vector and a recombinant 1,5-anhydroglucitol dehydrogenase protein prepared from the
                                                                                                                                                    The present invention describes the 1,5-anhydroglucitol dehydrogenase protein (1,5-AGDH) isolated from Agrobacterium tumefaciens. The 1,5-AGDH protein is useful as a detecting reagent for early stage diabetes. The present sequence represents a PCR primer for 1,5-AGDH, which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; NADH ubiquinone oxidoreductase 20KD subunit; BioNADH20; cancer; nervous system disease; retrograde disease; gene therapy; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention provides the protein and coding sequences of human NADH ubiquinone oxidoreductase 20KD subunit, designated BioNADH20. The sequences can be used in the treatment of cancer and retrograde diseases in the nervous system. The present sequence is a PCR primer for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human NADH ubiquinone oxidoreductase 20KD subunit cDNA PCR primer #2
                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New human NADH ubiquinone oxido-reductase 20KD subunit for treating
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Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                              0.8%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          retrograde diseases in the nervous system and cancer,.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 3 A; 5 C; 12 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                  Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                              Pred. No. 6.8e+02;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 3; Page 12(Disclosure); 21pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SHEN-) SHENGYUAN GENE DEV CO LTD SHANGHAI.
                                                                                                                           Example 2; Page 17; 22pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    coding sequence of the invention
                                                                                                                                                                                                                                                                                                                                               365 AGAGTGACCAGGCTTCAG 382
                                                                                                                                                                                                                                                                                                                                                                               C)
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ilarity 88.9%;
Conservative C
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                                                                                                                                                                                                                                                                                                                                                                             19 AGAGTGACCAGACTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAI66452 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                   Conservative
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Best Local Similarity
...hes 16; Conserva
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              WPI; 2001-128253/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-NOV-1999;
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                                                                                               transformant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAI66452;
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10017621-381.rng

BP.

20

ABL45558 standard; DNA;

RESULT 567

ABL45558

ABL45558;

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The invention relates to antisense compounds targeted to a nucleic acid molecule encoding a signal transducer and activator of transcription (STAT) protein, specifically STAT3, where the antisense compounds inhibit the expression of STAT3. The antisense sequences are useful for inhibiting the expression of STAT3 in cells or tissues, inducing Fasmediated apoptosis in cells, and sensitising cells to apoptosis. They are also useful for treating an animal having a disease or condition associated with STAT3. These disorders include inflammatory or autoimmune disease, particularly rheumatoid arthritis, cancers, such as those of the Preast, prostate, brain and head and neck and leukaemias, myslomas. Melanomas and lymphomas. Also treatable are human diseases or conditions characterised by a reduction in apoptosis or an insensitivity to apoptotic signals. The sequences of the invention can be used in clinical tresearch, for detecting and determining the role of STAT3 in various cell functions and physiological processes and for diagnosing conditions associated with the expression of STAT3. The sequences represent cDNA encoding human STAT3 and human STAT3 oligonucleotides
                                                                                                                                                                                                                                                                                                                           antisense gene therapy; Fas-mediated apoptosis; inflammatory disease; utcimmune disease; themmatoid arthritis; cancer; breast; prostate; head; neck; brain; leukaemia; myeloma; melanoma; lymphoma; apoptosis; antiinflammatory; immunosuppressive; antiinflammatory; immunosuppressive; antiinflammatory;
                                                                                                                                                                                                                                                                                                          STAT3; human; signal transducer and activator of transcription; ss; STAT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel antisense compound useful for treating and diagnosing inflammatory diseases and cancers, is targeted to a nucleic acid molecule encoding signal transducer and activator of transcription proteins.
                                                                                                                                                                                                                                                                    Human STAT3 antisense phosphorothioate oligodeoxynucleotide #26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 14.8; DB 1; Length 20; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 2; Page 13; 21pp; English.
554 CCCTCAGCCGCCGCCTCC 571
                         20 CCCTCGGCTGCCGCCTCC 3
                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-JAN-2001; 2001US-00758881.
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                                                                                                                                        AAS96793 standard; DNA; 20
                                                                                                                                                                                                                         (first entry)
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Best Local Similarity 88.9
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-009991/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KARR/) KARRAS J G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2001029250-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens.
                                                                                                                                                                                                                           26-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                               cytostatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Karras JG;
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                                                                                                  RESULT 566
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                                                                                                                       AAS96793
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The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell consistent of the maximum in the specified discrimination on the specified discrimination of the clones in the multiwell plates of the specified and lateral directions; (f) the mixed clones are cultured and the constituted as the positions on the chromosome and arrayed. The reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABLA2557 to ABLA5322 represent CTM represent PCR primers for human chromosome lagd2.1, which are specifically claimed for use in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                                                                                      Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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88.9%; Pred. No. 6.8e+02;
live 0; Mismatches 2; Indels
                                                                                     Human chromosome 21q22.1 PCR primer SEQ ID NO:2602.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 6; Page 56; 528pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1416 TCGAAATCGGATCTCCGC 1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAD35074 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                     12-MAR-2001; 2001JP-00068285.
                                                                                                                                                                                                                                                                                                                        10-MAR-2000; 2000JP-00066716.
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                                                                                                                                                                                                                                                                                                                                                       (RIKA ) RIKAGAKU KENKYUSHO.
(GENO-) GENOTEX YG.
                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Arraying genome clones,
                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-144136/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sest Local Similarity
                                                                                                                                           PCR primer; ss.
                                                                                                                                                                                                              JP2001321190-A.
                                                    11-APR-2002
                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                 20-NOV-2001.
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AAD35074
ID AAD3507
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AC AAD3507
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Gaps

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2; Indels

0; Mismatches

922 CIGITCCAGCIGCICCGT 939

2 crdrrccaccrdcrdcar 19

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Human; signal transducer and activator of transcription 3; ischaemia; immune response; Stat3; coronary atherosclerosis; vascular occlusion; hypoxia; stroke; anglogenesis; myocatdial infarction; hypoglycaemia; inflammation; chronic obstructive pulmonary disease; cardiac arrest; insulin dependent diabetes mellitus; emphysema; trauma; scleroderma; shock; chronic active hepatitis; adult respiratory distress syndrome; nitrogen necrosis; proliferative angiopathy; autoimmune thyroiditis; sjogren's syndrome; multiple sclerosis; Addison's disease; epilepsy; polymyositis; rheumatoid arthritis; autoimmune infertility; anaemia; proliferative disease; drave's disease; ulcerative colitis; sarcoma; carcinoma; degenerative disorder; gene therapy; growth deficiency; cirrhosis; hypoproliferative disorder; lesion; antisense; ss.
                                                                                                          Human Stat3 antisense oligonucleotide #8.
(first entry)
25-JUL-2002
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Homo sapiens

WO200220032-A1

14-MAR-2002

10-SEP-2001; 2001WO-US028254.

08-SEP-2000; 2000US-0231212P.

(UYJO ) UNIV JOHNS HOPKINS. (UYSF-) UNIV SOUTH FLORIDA.

Dalton W; Yu H, Pardoll D, Jove R,

WPI; 2002-362218/39.

Modulating anglogenesis and an immune response in an individual, for treating a hypoxic or ischemic condition, comprises administering a compound that modulates the activity of a signal transducer and activator of transcription 3.

Disclosure; Page 32; 94pp; English

The invention relates to a method of modulating angiogenesis and immune response. Method involves administering to an individual a compound that modulate the activity of signal transducer and activator of transcription 3 (Stat3). Modulating angiogenesis is useful for treating or preventing hypoxic or ischaemia condition or disorder which is the result of stroke, ischaemia, coronary atherosclerosis, mycoardial infarction, inflammation, tissue ischaemia in the lower extremities, infarction, trauma, vascular occlusion, prenatal or postnatal oxygen deprivation, suffocation, shock, chonic obstructive pulmonary disease, choking, asphyxia, hypoglycaemia, epilepsy, emphysema, adult respiratory distress syndrome, cardiac arrest, nitrogen necrosis, proliferative angiopathy e.g. diabetic microangiopathy with necvascularisation. Suppressing an immune response is useful for ameliorating a symptom of an autoimmune dependent diabetes mellitus, signates in syndrome, soll-orderma, polymyositis, chronic active hepatitis, mixed connective tissue disease, polymyositis, chronic active hepatitis, mixed connective tissue disease, polymyositis, chronic active hepatitis, diopathic thrombocytopenia purpura Gasave Goodpasture's disease, rheumatoid arthritis, cirrhosis, pemphigus vulgaris, autoimmune information active end conceptic proliferative and oncogenic disease which includes sarcomas and carcinomas e.g., bladder carcinoma, degenerative disease, growth deficiency, hypoproliferative disease in trauma, descrease and whomes e.g. prowth deficiency, hypoproliferative disease in trauma, descrease and whomes e.g. prowth deficiency, hypoproliferative disease in trauma, degenerative disease, growth deficiency, hypoproliferative disease in the method is useful in preventing or treating carcinoma, controllerative disease and encogenic disease which includes and oncogenic disease which includes and encoded and enc method is also used in gene therapy. The present sequence is human Stat3 antisense oligonucleotide

BP; 2 A; 7 C; 4 G; 7 T; 0 U; 0 Other; Sequence 20 0.8%; Score 14.8; DB 1; Length 20;

Query Match

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a compound 8-50 nucleobases in length targeted to a nucleic acid molecule encoding dual specific phosphatase 5, where the compound specifically hybridises with and inhibits the expression of dual specific phosphatase 5. The compound is used for treating an animal having a disease or condition associated with dual specific phosphatase 5 such as a hyperproliferative disorder, a developmental disorder, an inflammatory disorder or a disease which arises from aberrant apoptosis. Sequences ABX09082-ABX09139 represent human dual specific phosphatase 5 phosphorothioate oligonucleotides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antisense modulation of dual specific phosphatase 5 expression used in treating disorders e.g. inflammatory diseases.
                                                                                                                                                                                                                                                                                        Human; dual specific phosphatase 5; 8s; developmental disorder;
hyperproliferative disorder; inflammatory disorder aberrant apoptosis;
antiinflammatory; oytostatic; antiapoptotic; antiproliferative;
phosphorothioate oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                              Gaps
                                                                                                                                                                                                                                                           Human dual specific phosphatase 5 phosphorothioate oligonucleotide
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88.9%; Pred. No. 6.8e+02;
tive 0; Mismatches 2; Indels
                              Indels
Pred. No. 6.8e+02;
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                              0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19 GCCACTGGCAGAAGCTGC
                 88.9%;
                                                            922 CTGTTCCAGCTGCTCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACC69706 standard; DNA; 20
                                                                                                                                                                     ABX09073 standard; DNA; 20
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                              16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-041418/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Monia BP, Watt AT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
Les 16; Conserv
                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                  WO200297108-A2.
                                                                                                                                                                                                                                                                                                                                                                       sapiens
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                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
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                                                                                                                                          RESULT 569
                                                                                                                                                          ABX09073/c
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                                 Matches
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cancer; antisense oligonucleotide; 2'-O-methoxyethyl; 2'-MOB; control; phosphorothioate; ss.

nucleotides"

/note= "2'-0-methoxyethyl (2'-MOE)

mod\_base= OTHER

Q

\*tag=

modified\_base

'note= "phosphorothioate linkages"

Location/Qualifiers \*tag= a mod base= OTHER

. 20 \*tag=

Key modified base

Homo sapiens

/note= "2'-0-methoxyethyl (2'-MOE) nucleotides'

'mod base= OTHER

υ

/\*tag=

modified base

02-JUL-2002; 2002WO-US021090 03-JUL-2001; 2001US-00898556

WO2003004513-A1

16-JAN-2003

(ISIS-) ISIS PHARM INC

WPI; 2003-210336/20.

Bennett FC,

Human; HKR1; cytostatic; HKR1 inhibitor; hyperproliferative disorder;

Human HKR1 phosphorothioate antisense oligonucleotide SEQ ID NO:22

Page 291

10017621-381.rng

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given in ABRA13625 to ABRA1363. CLASP sequences have immunosuppressive, antiinflammatory, antirheumatic, antiarthritic, dermatological and nephrotropic activities. Compositions comprising a CLASP-1 protein can be used for treating or preventing a CLASP-1 mediated disease, particularly an autoimmune disease caused or exacerbated by increased activity of TH1 (helper T) cells. CLASP polymucleotides can be used as probes or primers for detecting CLASP polymucleotides can be used as probes or primers for detecting transgenic animals, chromosome mapping, identifying animals from minute biological samples, polymorphic markers for forensic analysis, and as reagents for paternity testing. CLASP polymucleotides or polypeptides are useful in treating or preventing autoimmune disease (e.g. Addison's disease, theumatoid arthritis, or dermatitis), organ rejection or graft-versus-host disease, inflammation (e.g. sepsis, arthritis or nephritis), or infectious diseases, ACC6649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New cadhesin-like asymmetry protein (CLASP) polypeptides and polynucleotides, useful for treating or preventing autoimmune diseases, organ rejection or graft-versus-host disease, inflammation, or infectious
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC69648 encode the cadherin-like asymmetry proteins (CLASPs)
                                                                          cadherin-like asymmetry protein; immune response; immunosuppressive; antiinflammatory; antirheumatic; antiarthritic; dermacological; nephrotropic; autoimmune disease; Addison's disease; dermatitis; rheumatoid archritis; organ rejection; graft-versus-host disease; inflammation; sepsis; arthritis; nephritis; infectious disease;
                                      Human; mouse; CLASP membrane protein; CLASP; cell surface molecule; cadherin-like asymmetry protein: immine reconnections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 10 A; 5 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   exemplification of the present invention
                Mouse CLASP-5 PCR primer SEQ ID NO:85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              to ACC69727 and ABR43634 to ABR43642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 2; Page 119; 398pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Candia AF
                                                                                                                                                                                                                                                                                                                                                                                                      03-AUG-2001; 2001US-0310028P.
15-OCT-2001; 2001US-00978244.
                                                                                                                                                                                                                                                                                                                                                                02-AUG-2002; 2002WO-US024482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                889 AACATCATCAACATGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ARBO-) ARBOR VITA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-354593/33
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Garman JD,
                                                                                                                                                                                                                                                                             WO2003025120-A2
                                                                                                                                                                           PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC69640 to
                                                                                                                                                                                                                                                                                                                        27-MAR-2003
                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                      Mus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lu PS,
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Matches
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New compounds, particularly antisense oligonucleotides targeted to a nucleic acid encoding HKR1, useful for treating a disease/condition associated with HKR1, such as hyperproliferative disorder, e.g. lung,

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targeted to, and which specifically hybridises with a nucleic acid molecule encoding HKRI, and inhibits the expression of HKRI. Also described: (1) a compound 8-50 nucleobase in length that specifically hybridises with at least an 8-uncleobase portion of an active site on nucleic acid molecule encoding HKRI; (2) a composition comprising the compound and a carrier or diluent; (3) a method for inhibiting the expression of HKRI in cells or tissues by contacting the cells or tissues with the compound so that expression of HKRI is inhibited; and (4) a method of treating an animal having a disease or condition associated with HKRI by administering to the animal a therapeutic or prophylactic amount of the compound so that expression of HKRI is inhibited HKRI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense oligonucleotides have cytostatic activities and can be used as HKR1 inhibitors. The compound, composition and methods are useful for treating a disease or condition associated with HKR1, such as a hyperproliferative disorder, e.g. lung, brain or breast cancer, by inhibiting the expression of HKR1. They are also useful in research and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            oligonucleotide used in the inhibition of human HKR1 in an example from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a compound 8-50 nucleobases in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diagnostics for modulating the expression of HKR1. The present seq represents a human HKR1 chimeric phosphorothioate oligonucleotide 2'-0-methoxyethyl (2'-MOE) wings and a deoxy gap, which is an anti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 3 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; Page 72; 105pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           brain or breast cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the present invention
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   represent sequences given in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
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Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
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Gaps

.; 0

.. DB 1;

Score 14.8; DB 1; Pred. No. 6.8e+02; 0; Mismatches 2;

Query Match 0.8%; Best Local Similarity 88.9%;

0;

16; Conservative

Matches

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(first entry)

28-APR-2003

ABZ70994;

RESULT 571
ABZ70994/C
ID ABZ709
XX
AC ABZ709
XX
DT 28-APR
XX

673 AGCAAGCTCACAGACAAC 690

Length 20; Indels

The present sequence which is an antisense

18

a

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The present invention describes a compound (I) that is 8-50 nucleobases in length: (a) targets a nucleic acid molecule encoding major histocompatibility complex (MHC) class II transactivator, and specifically hybridises with the nucleic acid encoding the MHC class II transactivator, and inhibits the expression of MHC class II transactivator, or (b) specifically hybridises with at least an 8-nucleobase portion of an active site on a nucleic acid molecule encoding MHC class II transactivator. (I) has immunosuppressive, antimicrobial, antidiabetic, antichemutalic, antiarthritic, cycostatic, notropic, neuroprotective and immunostimiant activities, and can be used as an MHC class II transactivator inhibitor. The MHC class II transactivator
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotides for modulating MHC class II transactivator gene expression, particularly useful for treating autoimmune disorders such as transplant rejection, Alzheimer's disease, or multiple sclerosis,
                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "phosphorothioate linkages; all cytidine residues
                                                                                                                                                                  Human; major histocompatibility complex class II transactivator; MHC class II transactivator; antisense modulation; Humanosuppressive; antimicrobial; antidiabetic; antirheumatic; antiarthritic; cytostatic; noctropic; neuroprotective; mmunostimulant; autoimmune disorder; MHC class II transactivator inhibitor; inffection; transplant rejection; diabetes; rheumatoid arthritis; cancer; Alzheimer's disease; multiple sclerosis; severe combined immunodeficiency disease;
                                                                                                                                   MHC class II transactivator antisense oligonucleotide SEQ ID NO:80.
                                                                                                                                                                                                                                                                                           phosphorothioate; antisense oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "2'-0-methoxyethyls"
16..20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "2'-0-methoxyethyls"
                                                                                                                                                                                                                                                                                                                                                                                                                                                             are 5-methylcytidines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; Page 84; 129pp; English.
                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                               'mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER
                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-DEC-2001; 2001US-00006366.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2002; 2002WO-US038616.
                                ACF39677 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mod base=
                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                 ๙
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 *tag= b
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                                                                                                                                                                                                                                                                                                                                                                                                               *tag=
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                                                                                                                                                                                                                                                                                                                                                                                           modified base
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                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or infection
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                                                                                                   29-SEP-2003
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                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                 ACF39677;
                ACF39677/c
RESULT 572
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to low
              disease or condition associated with MHC class II transactivator, e.g. autoimmune disorder or infection. The antisense oligomucleotides can be used for inhibiting the expression of MHC class II transactivator in cells or tissues. In particular, these diseases include transplant rejection, diabetes, rheumatoid arthritis, cancer, Alzheimer's disease, multiple sclerosis, or severe combined immunodeficiency disease. The antisense compounds are useful for diagnostics, prophylaxis, or as research reagents or kits. The present sequence represents a human MHC class II transactivator chimeric phosphorothioate antisense
                                                                                                                                                                                                   oligonucleotide, which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               low bone mineral density; BMD; bone damage; polymorphism; osteoporosis; single nucleotide polymorphism; SNP; PCR primer; ss; human.
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                                                                                                                                                                                                                                                                                                                        Gaps
antisense oligonucleotides can be used for treating an animal having
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Galwey N, Bennett S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Determining whether an individual is predisposed to susceptibility the bone mineral density (BMD) and/or bone damage, involves identifying polymorphisms in associated genes.
                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                            0.8%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 6.8e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IGF503 polymorphism marker PCR primer B primer seq.
                                                                                                                                                                                                                                         Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 8; Page 237; 246pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-DEC-2001; 2001US-0342711P.
04-NOV-2002; 2002US-0423559P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (INCY-) INCYTE GENOMICS INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                          Conservative
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Schafer A;
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                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADC98368;
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10017621-381.rng

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Polynucleotide for detecting single nucleotide polymorphisms existing in human gene, contains isolated human gene having specified sequence.
           WPI; 2003-441555/41.
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                                                                                                                                                                                                                                                                                                                                                                      invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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                                                                                                                                                                                                                                                                   NOVX; antidiabetic; anorectic; cardiant; hypotensive; antiatreriosclerotic; virucide; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; osteopathic; antiarthritic; antiinflammatory; dermatological;
                                                                                                                                                                                                                                                                                                                   antiasthmatic; antilipaemic; metabolic; diabetes; obesity; infectious; anorexia; cancer; cardiovascular; hypertension; atherosclerossis; neurodegenerative; Alzheimer's disease; Parkinson's; epilepsy; immune; osteoarthritis; haemopoietic; inflammatory skin; asthma; dyslipidaemia; neurogenesis; call differentiation; proliferation; haemopoiesis; wound healing; angiogenesis; gene therapy; chromosome mapping; tissue typing; human; NOV; PCR; primer; ss; RT-PCR.
                                                          Gaps
                                                          ·,
                               Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                             Forward Ag5335 RT-PCR primer used to amplify human NOV RNA
          Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
                                                        0; Mismatches
                                                                                 311 TCAGCTCTGCACCAGAGA 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001US-0341477P
2001US-0341540P
2001US-0344297P
2001US-0344297P
2001US-0344303P
2002US-03328BP
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                                                                                                                                                                    ADE28924 standard; DNA; 20 BP
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2001US-0338285P.
2001US-0341346P.
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28-MAY-2002; 2002US-0383534P
28-MAY-2002; 2002US-0383744P
29-MAY-2002; 2002US-0383829P.
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2002US-0401788P.
2002US-0406353P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002US-00287971
                               Query Match 0.8%;
Best Local Similarity 88.9%;
Matches 16; Conservative
                                                                                                        18 rcarcrcrcacaccrcaga
                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003040330-A2.
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17-APR-2002;
15-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
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                                                                                                                                                                                                                    29-JAN-2004
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The invention relates to a novel isolated NOVX polypeptide. The polypeptide of the invention demonstrates, antidiabetic, anorectic, cardiant, hypotensive, antiarteriosclerotic, virucide, antibacterial, fungicide, protozoacide, nootropic, neuroprotective, antiparkinsonian, atticonvulsant, osteopathic, antiarthritic, antiinflammatory, dermatological, antiasthmatic and antilpaemic activities. The oblypeptides, nucleic acid andictipaemic activities. The polypeptides, nucleic acid andictions may be useful for treating or diagnosing diseases including metabolic disorders such as diabetes and obesity, infectious diseases, anorexia, cancer, cardiovascular diseases including Mypertension and atherosclerosis, cardiovascular disoases including Mypertension and atherosclerosis, cardiovascular metapolic disorders e.g. osteoarthritis, haemopoietic disorders, inflammatory skin disorders e.g. osteoarthritis, haemopoietic disorders, inflammatory skin disorders, as than and dyslipidaemia.

Chrithermore, the nucleic acids and polypeptides may also be used to identify molecules that modulate or inhibit neurogenesis, cell differentiation and proliferation, haemopoiesis, wound healing and angiogenesis, as well as in gene therapy. Finally, the nucleic acids may conventive medicine and pharmacogenemics. The current sequence is that of the RT PCR primer which was used within the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
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New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         human, gene sequence; single nucleotide polymorphism; SNP; disease diagnosis; ss; PCR; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                        Example C; SEQ ID NO 301; 447pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1530 GCTACAAAGGAGGCCAG 1547
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .1-DEC-2001; 2001JP-00377637
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADH93653 standard; DNA; 20
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                                 The invention comprises isolated human gene sequences and PCR primer sequences which can be used to detect single nucleotide polymorphisms (SNPs). The DNA sequences of the invention are useful for detecting SNPs existing in human genes and for the diagnosis of human disease. The present DNA sequence represents a human gene PCR primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pharmaceutical composition for treating ailments associated with impaired
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       first active agent comprising an oligonuclectide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nuclectides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition may have a use in antisense gene therapy. The composition may have a use in antisense gene therapy. The composition is useful for treating or for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antiinflammatory steroid; ubiquinone, antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel pharmaceutical composition, which has a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           dysfunction; nasal airway dysfunction;
                                                                                                                                                                                           20;
                                                                                                                                                                                                                               2; Indels
                                                                                                                                                                                         Score 14.8; DB 1; Length Pred. No. 6.8e+02; Mismatches 2; Indels
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                                                                                                                                                       Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         lung inflammation; respiratory disease; ds.
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Claim 2; SEQ ID NO 1490; 529pp; Japanese.
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Tang L, Shahabuddin S;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human oligonucleotide sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                        BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                  923 TGTTCCAGCTGCTCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                      ABZ93374 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antisense; lung
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-229219/22.
                                                                                                                                                                                                         Local Similarity
wes 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200285308-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                            ABZ93374;
                                                                                                                                                                                         Query Match
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                                                                                                                                                                                                                                                                                                                                                                  RESULT 576
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                                                                                                                                                                                                                               Matches
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The invention describes a method of determining the ethnic origin of a male comprising obtaining a nucleic acid sample from the male, and dentifying at least two polymorphic markers in the nucleic acid sample indicative of the ethnic origin of the male, using at least one primer pair given in the specification. Also described is a method of: identifying polymorphic sites in a nucleic acid; a kit for determining the ethnic origin of an individual; determining the ethnic origin of an indoled an isolated nucleic acid segment of origin of a human male individual; an isolated nucleic acid segment of a human y chromosome comprising at least 10 contiguous bases including at least one of the polymorphic sites given in the specification; and determining the paternity of a human male conditional. The method is useful for determining the ethnic origin of a nucleic acid segment of a male, for paternity testing, for forensist studies or for diagnosis. This sequence represents a primer used to detect polymorphisms in the non-recombining region of the human Y chromosome (NRY).
                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                              receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
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reducing levels of adenosine
                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                             Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                Score 14.8; DB 1;
Pred. No. 6.8e+02;
0; Mismatches 2;
                                                                                                                                                                                                                      at ftp.wipo.int/pub/published_pct_sequences
       to adenosine,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NRY polymorphism detection primer #576.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1291 CTGTCCAACGAGGAGTTC 1308
                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
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ID ADM65705 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                    0.8%;
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       sensitivity
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
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                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (OEFN/) OEFNER P J.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
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SMRT;
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                                                                                                                                                                                                                                Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA.
                                                                                                                                                                                                                                                                                                                                                  analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrentaric agonist; respiratory disease; pulmonary vasconstriction; respiratory distress syndrome; allergic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         composition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention describes a novel composition (a) a first active agent
                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     to
                                                                                                                                                                                                                                                                                                      antisense; bronchoconstriction; allergy; hyposecretion; pain;
                                                                                                                                                                                                                                                                                                                     respiratory tract inflammation, adenosine sensitivity, lung, cancer, surfactant depletion, antiallergic, antiinflammatory, antiasthmatic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonuclectides, (c) instructions for adding a carrier and for use of the kit. The compos of the invention has antiallergic, antiinflammatory, antiasthmatic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oligonucleotide containing less percentage of adenosine, targeted unucleic acids associated with lung airway or lung dysfunction, and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pabalan J, Aguilar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pharmaceutical composition for treating asthma, has antisense
                           0.8%; Score 14.8; DB 1; Length 20; llarity 88.9%; Pred. No. 6.8e+02; Conservative 0; Mismatches 2; Indels
BP; 1 A; 4 C; 8 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                             emphysema; chronic obstructive pulmonary disease
pulmonary transplantation rejection; ss; primer.
                                                                                                                                                                                                                                                                           H86812-derived oligonucleotide SEQ ID 8616.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 15; SEQ ID NO 8616; 763pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sandrasagra A, Ka
L, Shahabuddin S;
                                                                                      1063 CCAACAAAGACATACTCC 1080
                                                                                                                 N
                                                                                                                                                                                        BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-APR-2001; 2001US-0286036P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (EPIG-) EPIGENESIS PHARM INC
                                                                                                              19 CCAACAAAGCCAGACTCC
                                                                                                                                                                                        ABD29604 standard; DNA; 20
                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pronchodilating agent
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Tang L,
                                     Local Similarity
ses 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200285309-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
Sequence 20
                                                                                                                                                                                                                                              29-JUL-2004
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Miller S,
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                            Query Match
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                                                         Matches
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                    with a disease or condition such as pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrom, eystic fibrosis, allergior rhinitis, pulmonary hypertension, emphyema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonuclectides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
inflammation, allergies and/or surfactant hypoproduction are associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SMRT inhibitor; cytostatic; antiinflammatory; antiarthritic; antifrheumatic; antisense therapy; inflammatory disorder; rheumaticid arthritis; hyperproliferative disorder; cancer; leukaemia; breast cancer; human; phosphorothioate; ss; chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
/note= "phosphorothioate linkages, and all cytidine
residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human SMRT chimeric phosphorothioate oligonucleotide SEQ ID NO:32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   silencing mediator for retinoid and thyroid hormone action;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel antisense compound targeted to nucleic acid encoding SMRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
                                                                                                                                                                                                                                                                                                                                                                                        Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                       Seguence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mod_base= OTHER
/note= "2'-0-methoxyethyls"
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/note= "2'-0-methoxyethyls"
                                                                                                                                                                                                                                                                                  prevent any unwanted effects due to it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1291 CTGTCCAACGAGGAGTTC 1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ٣
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
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                                                                                                                                                                                                                                                                                                                                                                                              0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                     88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 CCGTCCATCGAGGAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADG86318 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                      16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-082184/08.
                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2003106645-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     modified base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADG86318;
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chimeric.
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The present invention describes a compound (I) 8-50 nucleobases in length targeted to a nucleic acid molecule encoding SWRT (silencing mediator for retinoid and thyroid hormone action), where (I) specifically hybridises with the nucleic acid molecule encoding SWRT and inhibits expression of SWRT. (I) specifically hybridises with at least 8-nucleobase portion of a preferred target region on nucleic acid molecule encoding SWRT. Also carried is a composition (II) comprising (I) and a carrier or diluent. (I) and (II) have cytostatic, antiinflammatory, antistrict and as carried expression inhibitors. (I) is useful for inhibiting the expression of SWRT in cells or tissues. (I) is also useful for treating an animal having a disease or condition associated with SWRT, e.g., inflammatory disorder such as rheumatoid arthritis; or a hyperproliferative disorder expression of SWRT. (I) is useful for diagnostics, therapeutics, captression of SWRT. (I) is useful for diagnostics, therapeutics, captression of SWRT. which leavents and breast cancer. Dy inhibiting the expression of SWRT, which is used in an example from the present sequence inhibits human SWRT, which is used in an example from the present inhibits human SWRT, which is used in an example from the present inhuvention. N. B. The present sequence is designated as SEQ ID NO:30 in example 15 but corresponds to SEQ ID NO:32 in the Sequence Listing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel antisense compound targeted to nucleic acid encoding SMRT (silencing mediator for retinoid and thyroid hormone action), useful for
(silencing mediator for retinoid and thyroid hormone action), useful for treating animal having disease associated with SMRT such as cancer, rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SMRT; silencing mediator for retinoid and thyroid hormone action; SMRT inhibitor; cytostatic; antiinflammatory; antiarthritic; antirheumatic; antisteense therapy; inflammatory disorder; rheumatoid archritis; hyperproliferative disorder; cancer; leukaemia; breast cancer; human; ss; target.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.8%; Score 14.8; DB 1; Length 20; 38.9%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                   Example 15; SEQ ID NO 32; 260pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               target region SEQ ID NO:63.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   304 GGCCCACTCAGCTCTGCA 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GGCCCACCTGCTCTGCA 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-MAR-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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triggeted to a nucleic acid molecule encoding SMRT (silencing mediator for retinoid and thyroid hormone action), where (1) specifically hybridises with the nucleic acid molecule encoding SMRT and inhibits expression of SMRT. (1) specifically hybridises with at least 8-nucleobase portion of a preferred target region on nucleic acid molecule encoding SMRT. Also described is a composition (11) comprising (1) and acarrier or diluent. (1) and (II) have cytostatic, antidiflammatory, antiarthitic and antirheumatic activities, and can be used in antisense therapy, and as CMRT expression inhibitors. (1) is useful for trialing the expression of SMRT in cells or tissues. (1) is useful for trialing the expression of SMRT in cells or condition associated with SMRT, e.g., inflammatory disorder such as rheumatoid arthritis; or a hyperproliferative disorder such as rheumatoid arthritis; or a hyperproliferative disorder such as rheumatoid arthritis; or a hyperproliferative disorder corphylaxis and as research reagents and breast cancer, by inhibiting the expression of SMRT target region sequence. Trophylaxis and as research reagents and kits. The present sequence represents a human SMRT target region sequence; which is used in an example from the present invention. N.B. The present sequence is example from the present invention. N.B. The present sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                   The present invention describes a compound (I) 8-50 nucleobases in length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "OTHER= Phosphorothioate backbone. All cytidines
are 5-methylcytidines"
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/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic; antidiabetic; antiinfertility; gene therapy;
cyclin-dependent kinase 4; diabetes; infertility;
hyperproliferative disorder; cancer; antisense technology; human; ss.
treating animal having disease associated with SMRT such as cancer, rheumatoid arthritis.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cyclin dependent kinase 4 antisense oligonucleotide #28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 4 A; 5 C; 9 G; 2 T; 0 U; 0 Other;
                                                            Example 15; SEQ ID NO 63; 260pp; English
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0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%;
88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 GGCCCACCTGCTCTGCA
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/*tag= b
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Best Local Similarity 88.9
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           in the Sequence Listing.
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02-JUL-2002; 2002US-00188779.

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ADI19239 standard; DNA; 20
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                                                                                                                                                                                                                                            16; Conservative
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        (ISIS-) ISIS PHARM INC
                                             WPI; 2004-022085/02
                                                                                                                                                                                                                                  Local Similarity
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                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                  ADI19239;
                           Watt AT;
                                                                                                                                                                                                                                                                                                               583
                                                                                                                                                                                                                                            Matches
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                                                                                                                                                                                                                                                                                  0
                                                                                                                                                   The invention describes a new antisense oligonucleotide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclindependent kinase 4, specifically hybridises with the nucleic acid encoding cyclin-dependent kinase 4 and inhibits expression of cyclindependent kinase 4. The antisense oligonucleotide is useful for preparing a composition for treating diabetes, infertility or hyperproliferative disorder, e.g., cancer. This sequence represents a human cyclin dependent kinase 4 antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'note = "OTHER = Phosphorothioate backbone. All cytidines
                                                                                    New antisense oligonucleotide, having a sequence targeted to a nucleic acid encoding cyclin-dependent kinase 4, useful for preparing a composition for treating diabetes, infertility or hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene therapy, antisense technology, PCTAIRE protein kinase 2; neurological disorder; human; PCTAIRE protein kinase 2; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                               Human PCTAIRE protein kinase 2 antisense oligonucleotide #24.
                                                                                                                                                                                                                                                              0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                            Seguence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                   Example 15; SEQ ID NO 47; 90pp; English
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                                                                                                                                                                                                                                                                                                     254 CTGGAGAGGCCCCCCACAC 271
                                                                                                                                                                                                                                                                                                                       20
                                              Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                     ADI19170 standard; DNA; 20 BP
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        02-JUL-2002; 2002US-00188779
                                                                                                                                                                                                                                                                                                                      3 CTAGAGAGGCCCCCTCAC
                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                  disorder, e.g., cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . 20
                           (ISIS-) ISIS PHARM INC
                                               Freier SM,
                                                                  WPI; 2004-081710/08
                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
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                                               Dean NM,
                                                                                                                                                                                                                                                                                                                                                   RESULT 582
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The invention describes a new antisense oligonucleotide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE protein kinase 2, that specifically hybridises with the nucleic acid encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp. The antisense oligonucleotide is useful for preparing a composition for treating e.g., neurological disorders. This sequence represents a human PCTAIRE protein kinase 2 antisense oligonucleotide.
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/mod_base= OTHER=
/note= "OTHER= Phosphorothioate backbone. All cytidines
are 5-methylcytidines"
New antisense oligonucleotide, having a sequence targeted to a nucleic acid encoding PCTAIRE protein kinase 2, useful for preparing a composition for treating neurological disorders.
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/note= "OTHER= 2'-O-Methoxyethyl (2'-MOE) nucleotides"
15. .20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene therapy, antisense technology, PCTAIRE protein kinase 2, neurological disorder, human, PCTAIRE protein kinase 2; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human PCTAIRE protein kinase 2 antisense oligonucleotide #93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.8%; Score 14.8; DB 1; Length 20;
89.9%; Pred. No. 6.8e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                            Claim 1; SEQ ID NO 37; 58pp; English.
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/mod_base= OTHER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
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WPI; 2004-143840/14.
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                                                                                                                                                                          The invention describes a new antisense oligonucleotide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding PCTAIRE protein kinase 2, that specifically hybridises with the nucleic acid encoding PCTAIRE protein kinase 2 and having a sequence comprising 20 bp. The antisense oligonucleotide is useful for preparing a composition for treating e.g., neurological disorders. This sequence represents a human PCTAIRE protein kinase 2 antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         polo-like kinase; polo-like kinase inhibitor; antisense oligonucleotide; cytostatic; antiinflammatory; antimicrobial; antisense gene therapy; kinase inhibitor; hyperpoliferative discorder; cancer; non-small cell lung cancer; oesophageal cancer; infection; inflammation; tumour; human; phosphorothioate; 2'-O-methoxyethyl; ss.
                                                       New antisense oligonucleotide, having a sequence targeted to a nucleic acid encoding PCTAIRE protein kinase 2, useful for preparing a composition for treating neurological disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                          Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
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'note= "2'-0-methoxyethyls"
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16. .20
                                                                                                                                    Example 15; SEQ ID NO 106; 58pp; English
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                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.8
Best Local Similarity 88.9
Matches 16; Conservative
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                WPI; 2004-022085/02.
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
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The present invention describes a compound (1) of 8-80 nucleobases in length targeted to a nucleic acid molecule encoding polo-like kinase, where (1) specifically hybridises with nucleic acid molecule encoding polo-like kinase, or specifically hybridises with at least an 8-nucleobase portion of a preferred target region on a nucleic acid molecule encoding polo-like preferred target region on a nucleic acid molecule encoding polo-like preferred target region on a nucleic acid molecule encoding polo-like kinase. Also described: (1) a composition comprising (1) and a pharmaceutical carrier or diluent; (2) inhibiting the expression of polo-like kinase in cells or tissues comprising contacting the cells or tissues with (1); (3) treating an animal having a disease or condition associated with polo-like kinase comprising deministering to the animal a therapeutic or prophylactic amount of (1) so that expression of polo-like kinase is inhibited; and (4) screening for an antisense compound comprising at least an 8-nucleobase portion which is compounds comprising at least an 8-nucleobase portion which is compounds comprising at least an 8-nucleobase portion which is compounds comprising at least an 8-nucleobase portion which is compounds comprising at least an 8-nucleobase portion which is compounds comprising at least an 8-nucleobase portion which is compounde antiencry and an attisted argument and antimicrobial activities, and can be used in antisense or compounds (1) can be used for inhibitor. The antisense or oligonucleotides or compounds (1) can be used for inhibiting the expression of polo-like kinase, and can be used or compounds (2) cancer or oceophageal cancer. The antisense compounds are also useful as a research reagents and kits, or in diagnostic, therapeutic and prophylactic applications, e.g. to prevent or delay infection, inflammation or tumour formation. The present expression of polo-like kinase chimeric phosphorochioate antisense oligonucleotide, which is used in an example from the present invention.
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New antisense compounds targeted to nucleic acid molecules encoding pololike kinase, useful for treating diseases associated with aberrant expression of polo-like kinase, e.g. non-small cell lung cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      polo-like kinase; polo-like kinase inhibitor; antisense oligonucleotide; cytostatic); antiinflammatory; antimicrobial; antisense gene therapy; kinase inhibitor; hyperproliferative disorder; cancer; non-small cell lung cancer; oseophageal cancer; infection; inflammation;
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88.9%; Pred. No. 6.8e+02;
ve 0; Mismatches 2; Indels
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                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 32; 138pp; English.
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Wyatt JR,

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This invention relates to a novel DNA molecule which comprises a DNA molecule made up of the following elements in a 5' to 3' direction: a first restriction endomuclease site; a T3 promoter site; at least one Tag gene comprising at least 5 20mer Tag sequences; a Poly A site having at least 21 consecutive A residues, a second restriction endomuclease site which may be the same or different than the first restriction endomuclease site promoter. The invention may be useful in nucleic acid analysis, in particular to synthetic Tag genes useful as assay controls, in assay development, product development and validation and for quality control. The present sequence is that of a Tag oligonucleotide probe which may be used during the creation of the novel DNA molecule of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New DNA molecules made by annealing and extending overlapping 60mer oligonucleotides, useful in producing synthetic Tag genes useful as assay controls, in assay development, product development and for quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.8e+02;
ve 0; Mismatches 2; Indels
assay development; product development; product validation; quality control; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human; single nucleotide polymorphism; SNP; ss; primer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; SEQ ID NO 575; 91pp; English.
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Best Local Similarity 80..
Local Similarity 80..
Local Similarity 80..
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                                                                                                                                                                                                                                                                                                                                                            (AFFY-) AFFYMETRIX INC
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                                                                                                                                                         WO2004007684-A2.
                                                                                                                                                                                                                                                                                                                                                                                                              Christians FC;
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                                                                                Synthetic.
Unidentified
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADK96858,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a compound (I) of 8-80 mucleobases in clear trageted to a nucleic acid molecule encoding polo-like kinase, where (I) specifically hybridises with nucleic acid molecule encoding proposition of a preferred target region on a nucleic acid molecule encoding polo-like kinase, or specifically hybridises with at least an 8-nucleobase portion of a kinase target region on a nucleic acid molecule encoding polo-like kinase candidate acid molecule encoding polo-like kinase in calls or tissues comprising contacting the expression of polotissues with (I); (3) treating an animal having a disease or condition tissues with (I); (3) treating an animal having a disease or condition cassociated with polo-like kinase comprising administering to the animal comprising contacting a preferred target region of a nucleic acid compounds comprising ontacting a preferred target region of a nucleic acid molecule encoding polo-like kinase with one or more candidate antisense compounds which inhibits the expression of a nucleic acid molecule encoding polo-like kinase into inhibit or the preferred target region, and selecting for one or compounds comprising at least an 8-uncleobase portion which is complementary to the preferred target region, and selecting for one or nucleic acid molecule encoding polo-like kinase. (I) has expression of antiinflammatory and antiinflowing acide in a stinase inhibitor. The antisense or compounds (C) can be used for inhibiting the associated with aberrant expression of polo-like kinase, and can be used for inhibiting the cancer or oesophageal cancer. The antisense compounds are also useful as research reagents and kits, or in diagnostic, therapeutic and and kits, or in diagnostic, therapeutic and cancer or polo-like kinase, e.g. to prevent or delay infection, inflammation or tumour formation. The present sequence represents an example from the present inflammation or tumour formation. The present sequence in an example from the present is used in an example from the present in the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                         New antisense compounds targeted to nucleic acid molecules encoding pololike kinase, useful for treating diseases associated with aberrant expression of polo-like kinase, e.g. non-small cell lung cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               restriction endonuclease site; T3 promoter site; Tag gene; Poly A site; T7 Promoter; nucleic acid analysis; synthetic Tag gene; assay control;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic acid analysis-related Tag probe SeqID575.
                                                                                                                                                                                                                                                                                                                                                                                                                           Example 15; SEQ ID NO 99; 138pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           971 TACACCGAGACCTCAAGC 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 Trcarcaacaccrcaage 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.8%;
                                              25-JUL-2003; 2003WO-US023413
                                                                                                  30-JUL-2002; 2002US-00209405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADJ85507 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-MAY-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                                                                                                                                                 (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                     Freier SM;
                                                                                                                                                                                                                                                    WPI; 2004-143840/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                 esophageal cancer.
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ADJ85507;

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Gaps

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BP.

ADJ17762 standard; DNA; 20

(first entry)

20-MAY-2004

ADJ17762;

18 ACACCGAGACACCAAGCC 1

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                                                                                                                                                                                                       The present invention relates to a polynucleotide isolated from a human gene and is useful for detecting a single nucleotide polymorphism in a human gene or for diagnosing of disease. The invention enables the detection of a single nucleotide polymorphism in a human gene. The present sequence represents a primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to a polynucleotide isolated from a human gene and is useful for detecting a single nucleotide polymorphism in a human gene or for diagnosing of disease. The invention enables the detection of a single nucleotide polymorphism in a human gene. The present sequence represents a primer of the invention.
                                                                                      Novel polynucleotide useful for PCR amplification along with two DNA fragment from another set of sequences, or for detecting single nucleotide polymorphism in human gene.
                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel polynucleotide useful for PCR amplification along with two fragment from another set of sequences, or for detecting single
                                                                                                                                                                                                                                                                                                                                                                                                                               o.
                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            human; single nucleotide polymorphism; SNP; ss; primer.
                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 0 A; 4 C; 8 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                  Claim 2; SEQ ID NO 5887; 2627pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 2; SEQ ID NO 3898; 2627pp; Japanese.
(KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleotide polymorphism in human gene.
                                                                                    Novel polynucleotide useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    392
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Primer of the invention #589.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-MAR-2002; 2002JP-00064373.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         08-MAR-2002; 2002JP-00064373
                                                                                                                                                                                                                                                                                                                                                                                                                                                               375 GGCTTCAGCCACGTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADK94869 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                      16; Conservative
                                           WPI; 2004-093977/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-093977/10.
                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                               Query Match
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XX
AC ADK94
XX
DT 06-MF
XX
DT 06-MF
XX
XX
SX
Syntl
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SY
PN JP20(
XX
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PP 08-M
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This invention relates to novel antisense compounds useful for modulating the expression of liver related homologue-1 (LRH1) and splice variants threeof. Specifically, it refers to compositions 8-30 nucleobases in length that target a portion on active site on the nucleic acid molecule encoding LRH1 (also known as NRSA2). LRH1 is a monomeric orphan nuclear receptor protein that functions as a tissue specific transcription factor. The present invention describes antisense oligonucleotides that comprise at least one modified internucleoside linkage, a phosphorothioate linkage; at least one modified sugar moiety, a 2'-O-methoxyethy1 (2' MDE) and at least one modified nucleobase, a 5-methylcytidine. These antisense compounds are useful for treating or diagnosing a disease associated with LRH1, such as breast cancer, dyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), high
                                                            human; ss; liver related homologue-1; LRH1; NR5A2; antisense; phosphorochioate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis; low HDL; high density lipoprotein; high LDL; hypercholesterolaemia; gall stone; triglyceridaemia; obesity; heparitis; heparcocliular carcinoma; aromatase; cytostatic; antilipaemic; antiarteriosclerotic; anorectic; heparotropic; litholytic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleotides. All
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag= c
/mod_base= OTHER
/note= "OTHER= 2' methoxyethyl (2' MOE) nucleotides. All
cytidine nucleobases are 5-methylcytidine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense oligonucleotides targeted to a nucleic acid encoding liver related homologue-1 (LRH1), useful for treating breast cancer, dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
Antisense DNA oligo used to modulate human LRH1 expression SeqID 2312.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "OTHER= 2' methoxyethyl (2' MOE) nu
cytidine nucleobases are 5-methylcytidine.
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/label= OTHER= phosphorothioate backbone
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUL-2002; 2002US-0392813P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUL-2003; 2003WO-US020865
                                                                                                                                                                                                                                                                                                   antiinflammatory; virucidal
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/*tag=
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972 ACACCGAGACCTCAAGCC 989

Local Similarity 88.9

Matches

Query Match

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Gaps

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0.8%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels

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New antisense oligonucleotides targeted to a nucleic acid encoding liver related homologue-1 (LRH1), useful for treating breast cancer,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nucleotides. All
                                                                                                                                                                                                                                                                                                                                                                                                           human; ss; liver related homologue-1; LRH1; NR5A2; antisense; phosphorothicate; 2' MOE; breast cancer; dyslipidaemia; atherosclerosis; jow HD1; high density lipoprotein; high LD1; hypercholesterolaemia; all stone; triglyceridaemia; obssity; hepatistis; hepatocellular carcinoma; aromatase; cytostatic; antilipaemic; antiateriosclerotic; anorectic; hepatotropic; litholytic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        methoxyethyl (2' MOE) nucleotides. All
ses are 5-methylcytidine."
         triglyceridaemia, obesity, hepatitis B virus-mediated acute or chronic hepatitis, as well as hepatocellular carcinoma or a condition associated with aromatase activity. Accordingly, these compositions exhibit avoidantic, antilipaemic, antiarteriosclerotic, anorectic, hepatotropic, litholytic, antiinflammatory and virucidal activities. This oligonucleotide sequence is an antisense DNA oligo used to modulate the
                                                                                                                                                                                                                                                                                                                                                                                   Antisense DNA oligo used to modulate human LRH1 expression SeqID 2958.
                                                                                                                                                                             Gaps
LDL (low density lipoprotein), hypercholesterolaemia, gall stones,
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/note= "OTHER= 2' methoxyethyl (2' MOE) nu
cytidine nucleobases are 5-methylcytidine.
                                                                                                                                                  Score 14.8; DB 1; Length 20;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /label= OTHER= phosphorothioate backbone
                                                                                               expression of the human LRH1 protein of the invention
                                                                                                                        Sequence 20 BP; 4 A; 1 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "OTHER= 2' met
cytidine nucleobases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
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                                                                                                                                                         0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antiinflammatory; virucidal.
                                                                                                                                                                                                                                       AAACATCCACTCTGCCTC
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                                                                                                                                                                                                                                                                                                          ADJ18408 standard; DNA; 20
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modified base
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Matches
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This invention relates to novel antisense compounds useful for modulating the expression of liver related homologue-1 (LRH1) and splice variants thereof. Specifically, it refers to compositions 8-30 nucleobases in thereof. Specifically, it refers to compositions 8-30 nucleobases in competed and active site on the nucleic acid molecule encoding LRH1 (also known as NRSA2). LRH1 is a monomeric orphan nuclear receptor protein that functions as a tissue specific nuclear receptor protein that functions as a tissue specific conformation factor. The present invention describes antisens conformed to coligonal enclosition that comprise at least one modified internucleoside coligonal contriborate linkage; at least one modified sugar moiety, linkage, a phosphorothioate linkage; at least one modified sugar moiety, linkage, a phosphorothioate linkage; at least one modified nucleobase, a 5-a 2-0-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-a 2-0-methoxyethyl (2' MOE) and at least one modified nucleobase, a 5-a 2-0-methoxyethyl (2' MOE) and at least one modified sugar moiety, lippoprotein), hypercholesterolaemia, gall stones, corriging a disease associated with LRH1, suche mediated acute or chronic corriging mensity lippoprotein), hypercholesterolaemia, gall stones, with aromatase activity, Accordingly, these compositions exhibit with a nontation and activities and antisiense DNA oligo used to modulate the correct of the human LRH1 protein of the invention.
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cytidine nucleobases are 5-methylcytidine."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   human; ss; liver related homologue-1; LRH1; NR5A2; antisense; phosphorothicate; 2' MOE, breast cancer; dyslipidaemia; atherosclerosis; low HDL; high density lipoprotein; high LDL; hypercholesterolaemia; and l stone; triglyceridaemia; obesity; hepaticitis; hepatocellular carcinoma; aromatase; cytostatic; antilipaemic; antiarteriosclerotic; anorectic; hepatotropic; litholytic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antisense DNA oligo used to modulate human LRH1 expression SeqID 2017.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
0
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/label= OTHER= phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.8; DB 1; Length 2
88.9%; Pred. No. 6.8e+02;
ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 4 A; 1 C; 9 G; 6 T; 0 U; 0 Other;
                                                                        Example 15; SEQ ID NO 2958; 909pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1447 AAACATCCATTCTTCCTC 1464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAchrecacrerecte 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiinflammatory; virucidal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADJ17467 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADJ17467;
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New antisense oligonucleotides targeted to a nucleic acid encoding liver related homologue-1 (LRH1), useful for treating breast cancer, dyslipidemia, atherosclerosis, hypercholesterolemia, or hepatitis.
                                                                                                                                             Example 15; SEQ ID NO 2017; 909pp; English.
                                      01-JUL-2003; 2003WO-US020865.
                                                     01-JUL-2002; 2002US-0392813P
                                                                                                                                                                                                                                                                                                                                                                                                                                  ADM93669 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                16; Conservative
                                                                    (PHAA ) PHARMACIA CORP.
                                                                                                  WPI; 2004-083058/08.
                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 16; Conserv
        WO2004003201-A2.
                        08-JAN-2004.
                                                                                    Kane CD;
                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADM93669;
                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 592
                                                                                                                                                                                                                                                                                                                                                                                                                            ADM93669
qq
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This invention relates to novel antisense compounds useful for modulating the expression of liver related hamologue-1 (LRHI) and splice variants of thereof. Specifically, it refers to compositions 8-30 mucleobases in length that target a portion of an active site on the nucleic acid molecule encoding LRHI (also known as NEA2). LRHI is a monomeric orphan cranscription factor. The present invention describes antisense curscription factor. The present invention describes antisense linkage, a phosphorothioate linkage; at least one modified internucleoside linkage, a phosphorothioate linkage; at least one modified sugar moiety, methylcytidine. These antisense compounds are useful for treating or diagnosing a disease associated with LRHI, such as breast cancer, cyslipidaemia, atherosclerosis, low HDL (high density lipoprotein), hypercholesterolaemia, gall stones, cyfslipidaemia, obesity, heparitis B virus-mediated acute or chronic with aromatese activity. Accordingly, these compositions associated cytostatic, antilipaemic, antilatreriosclerotic, ancectic, hepatotropic, coligonucleotide sequence is an antisense DNA oligo used to modulate the expression of the human LRHI protein of the invention.
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88.9%; Pred. No. 6.8e+02;
ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 4 A; 1 C; 9 G; 6 T; 0 U; 0 Other;
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1447 AAACAICCAIICTICCIC 1464

20 AAACAICCACICIGCCIC 3

Human NOVX PCR primer #13. (first entry) 01-JUL-2004 

Human, NOVX, PCR, ss; congenital heart defect; cardiomyopathy; atherosclerosis; hypertension; pulmonary stenosis; scleroderma; adenocarcinoma; haemophilia; graft-versus-host disease; cancer; neurodegenerative disorder; Alzheimer; s disease; Parkinson's disease; multiple sclerosis, diabetes; obesity; bronchial asthma; acquired immunodeficiency syndrome; AIDS; Crohn's disease; infectious disease; anorexia; immune disorder; primer.

Homo sapiens

SHENOY G. SHIMKETS R. A. SMITHSON G. SPADERNA S. K. STARLING G.

(STAR/)

SPAD/

(SHEN/)

16-MAY-2002; 2002US-0381043P.
02-JUL-2002; 2002US-0393148P.
02-JUL-2002; 2002US-0393162P.
06-AUG-2002; 2002US-0401479P.
06-AUG-2002; 2002US-040159P.
07-AUG-2002; 2002US-0401593P. 2001US-0333072P 2001US-0345398P 2001US-0348283P 2001US-0335610P 2001US-0332152P 05-NOV-2002; 2002US-00287971 29-NOV-2001; 2001US-00997425. 05-FEB-2002; 2002US-0354807P. 15-MAY-2002; 2002US-0380968P. 16-MAX-2002; 2002US-0381043P. 2001US-0336576P 2002US-0406181P LI L. MACDOUGALL J R. MALYANKAR U M. KEKUDA R. KHRAMTSOV N V. LEPLEY D M. ALSOBROOK J P. ALVAREZ E. ROTHENBERG M E. BOLDOG F L.
BURGESS C B.
CASWAD S J.
CHAPOVAL A.
DHANABAL M.
ELINGER S R.
ELIERMAN K.
ETIERMAN K.
ETIERMAN K.
GTRENBERG S.
GRNGOLLI E A.
GERLACH V. ANDERSON D W. MCQUEENEY K.
MEZES P S.
MILLER C E.
MILLET I.
MISHRA V. PADIGARU M. PATTURAJAN M. PENA C E A. PEYMAN J A. RASTELLI L. GORMAN L. GROSSE W M. GUO X. HACKETT C. RIEGER D K. US2004067882-A1. BARON M. MAZUR A. 28-NOV-2001; 09-NOV-2001; 09-NOV-2001; 15-NOV-2001; 21-NOV-2001; 29-NOV-2001; 04-DEC-2001; 05-NOV-2001; 06-NOV-2001; 26-AUG-2002; 08-APR-2004 (BARO/) (BOLD/) (BURG/) (CASM/) (EDIN/) (EISE/) (ELLE/) (GERL/) (GORM/) (ETTE/) ANDE/ DHAN/ (GUOX/) (HACK/) (JIWW/) KEKU/ (MCQU/) GROS/ (LEPL/ MACD/ (MALY/ MISH/ (PATT/ PENA/ (MAZU/ (MILL/ (MILL/ PEYM/ RIEG/ PADI/ RAST/ 

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The invention relates to human Novx polypeptides and the polynucleotides cenceding them. The Novx polypeptides and polynucleotides are useful for encoding them. The Novx polypeptides and polynucleotides are useful for determining the presence of or predisposition to a disease associated with altered levels of the sequences in a mammalian subject, and for treating or preventing a pathology associated with Novx. The polypeptides are useful for treating or preventing disorders or to the polypeptides are useful for treating or preventing disorders or syndromes such as congenital heart defects, cardiomyopathy.

Compared to a congenital heart defects, cardiomyopathy, atherosclerosis, hypertension, pulmonary stenosis, solroders, anders, adenocarcinoma, haemophilia, graft-versus-host disease, cancer, adenocarcinoma, haemophilia, graft-versus-host disease, cancer, and multiple sclerosis, diabetes, alzheimer's disease, parkinson's disease, immunodeficiency syndrome (AlDS), Crohn's disease, infectious disease, immunodeficiency syndrome (AlDS), Crohn's disease, infectious disease, increase and immune disorders. This sequence represents a PCR primer used to amplify a human NoVX polynucleotide of the invention. Note: The constitution of data for this patent is also available from USPTO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         chimeric; antisense oligonucleotide; phosphorothioate; human; microsomal prostaglandin E2 synthase; mPGES-1; mPGES-1 inhibitor; microsomal prostaglandin E2 synthase inhibitor; cytostatic; antidiabetic; immunoamodulator; cardiant; neuroprotective; antiinflammatory; neuroprotective; notropic; antiarthritic; vasotropic; ophthalmological; immunoamodulatory; cardiovascular; gene therapy; inflammation;
                                                                                                                                                                         JP, Alvarez E, Anderson DW, Baron M, Boldog FL;
Casman SJ, Chapoval A, Dhanabal M, Edinger SR, Eisen A;
C, Ettenberg S, Gangolli EA, Gerlach V, Gorman L;
Guo X, Hackett C, Ji W, Kekuda R, Khramtsov NV;
Li L, Macdougall JR, Malyankar UM, Mazur A, Mcqueeney K;
Li L, Macdougall JR, Mishra V, Padigaru M, Patturajan M;
Miller CE, Millet I, Mishra V, Padigaru M, Patturajan M;
Peyman JA, Rastelli L, Rieger DK, Rothenberg ME;
Shimkets RA, Smithson G, Spaderna SK, Starling G;
Stone DJ, Tchernev VT, Twomlow N, Vernet CAM;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel isolated NOVX polypeptide useful treating or preventing disorders or syndromes such as Alzheimer's disease, Parkinson's disease, multiple sclerosis, diabetes, obesity, cancer, bronchial asthma, Crohn's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:638.
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0
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88.9%; Pred. No. 6.8e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example C; SEQ ID NO 301; 330pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1530 GCTACAAAAGGAGGCCAG 1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      segdata.uspto.gov/sequence.html.
                                                                                                                                                                                                                                                                                                                                                                       Zhong M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADM14451 standard; DNA; 20 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16; Conservative
                                                                                                                                                                                                                                                                                                        Pena CEA, Peyman JA, Ra
Shenoy SG, Shimkets RA,
Spytek KA, Stone DJ, To
                                                                                                                                                                                                                                                                                                                                                                       Voss EZ,
                 STONE D J.
TCHERNEV V T.
TWOMLOW N.
                                                                         VERNET C A M.
ZERHUSEN B D.
VOSS E Z.
                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-355303/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
SPYTEK K A.
                                                                                                                                          ZHONG M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUL-2004
                                                                                                                                                                                                           Burgess CE,
Ellerman K,
Grosse WM, G
                                                                                                                                                                                                                                                                                                                                                                              Zerhusen BD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADM14451;
                                                                                                                                                                                                                                                                        Lepley DM,
                                                                                                                                                                                                                                                                                           Mezes PS,
                                                                                                                                                                                          Alsobrook
                                                                                                        (ZERH/)
(VOSS/)
(ZHON/)
                                                              (TWOM/)
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  SPYT/)
                                         TCHE/)
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                       (/NOIS
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; 0

Gaps

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The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The the present invention also describes: (1) antisense compounds, pg44.3. The present invention also describes: (1) antisense compounds, comparising 8-30 bp targeted to a nucleic acid encoding having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid encoding compisitis its syression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal compises oligonucleotides and antisense compounds have cytostatic, having a disease or condition associated with medgeS-1. Impuestor cantidiabetic, immunomodulator, cardiant, neuroprotective, vasotropic, antiinflammatory, neuroprotective, nootropic, antiathritic, vasotropic, antiinflammatory, neuroprotective, nootropic, antiathritic, vasotropic, antiinflammatory, neuroprotective, nootropic, antiathritic, compound complements and passed or preparing a composition for treating a disease or composition associated with mpGES-1 entrating a disease or compensation, all passed or preparing a composition for treating a disease or compensation associated with mpGES-1 entrating a composition associated with mpGES-1 entrating a composition inverver isotramia or renerfusion initure. Or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g. inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
                                                                                                                                                                                                             /note= "phosphorothioate linkages and all cytidine residues are 5-methylcytidines"
Alzheimer's disease; arthritis; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; s6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 14.8; DB 1; Length 20; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                             /note= "2'-0-methoxyethyls"
                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "2'-0-methocyethyls"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 4; SEQ ID NO 638; 132pp; English.
                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                           /mod_base= OTHER
                                                                                                                                                                                                       base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-SEP-2002; 2002US-0413549P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-SEP-2003; 2003WO-US030374.
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                                                                                                                                                                                                                                                                                                                                     16. .20
                                                                                                                                                                       ...20
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                             /*tag=
                                                                                                                                                                                                         mod,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2004-305094/28
                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2004028458-A2
                                                                                                                                                                                                                                                                                                                                             modified base
                                                                                                                                                                                                                                                                 modified base
                                                                                                                                                                     modified base
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                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gierse JK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
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                                                                                                                 Synthetic
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0

Gaps

; 0

Indels

0; Mismatches

508 GGCTACCTGGAGAGCTG 525

Conservative

Best Local Similarity Matches 16; Conserv

gechaceregedadeere 3

20

g

ð

/mod\_base= OTHER /note= "Phosphorothioate linkages and all cytidines are 5 -methylcytidines"

/mod\_base= OTHER /note= "2'-methoxyethyl residues" 16. .20

/\*tag= a

modified base

'note= "2' -methoxyethyl residues"

US2004092465-A1

13-MAY-2004.

11-NOV-2002; 2002US-00293864.

11-NOV-2002; 2002US-00293864.

(ISIS-) ISIS PHARM INC

Dobie KW;

WPI; 2004-374983/35.

/\*tag= c /mod\_base= OTHER

modified\_base

Human; antisense; ss; Huntingtin interacting protein 1; HIP1; cellular apoptosis; Huntington's disease; chromosome 7q11.23.

Location/Qualifiers

Key modified\_base

Homo sapiens

ф

1. .20 /\*tag=

Human HIP1 antisense oligonucleotide ISIS251585.

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The invention relates to an isolated, mutant murine or human probabilizes ( PLC) gamma-2 protein. The mutant PLCgamma-2 proteins and nucleic acids that encode them may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate PLCgamma-2 captression. For example, the peptides and nucleic acids may be used to mutations or deletions in a patient's genome that affect the activity of PLCgamma-2 by expressing inactive proteins or to supplement the patients of production of PLCgamma-2. Conversely inhibitory nucleic acids may be proteins and nucleic acids may also be used in assays to identify and nucleic acids may also be used to down regulate expression and activity. The antibodies and provented to down regulate captes and activity. The antibodies and provented that may be prevented, diagnosed and/or treated by the above the provented in sequence corresponds to a PCR primer to proyarteritis nodosa. This sequence corresponds to a PCR primer to amplify the mouse phospholipase C gamma 2 gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mutant muxine or human Phospholipase C (PLC) gamma-2 proteins, useful for preventing, diagnosing and treating inflammatory diseases, e.g. Wegener's granulomatosis, Churg-Strauss syndrome or Polyarteritis nodosa.
                                                                                                                                                                                               ophthalmological, antiulcer; murine, human;
phospholipase C gamma-2 protein; diagnosis; Wegener's granulomatosis;
Churg-Strauss syndrome; Polyarteritis nodosa.
                                                                                                                                           Mouse phospholipase C gamma 2 gene amplification primer plcg2-40.
                                                                                                                                                                             primer; anti-inflammatory; dermatological; osteopathic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.8; DB 1; Length 20;
88.9%; Pred. No. 6.88+02;
.ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hanke P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Yu P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 4; SEQ ID NO 56; 229pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Schroeder A,
                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                01-SEP-2003; 2003WO-EP009690.
                                                                                                                                                                                                                                                                                                                                                                                                                30-AUG-2002; 2002US-0407517P
                                 ADO80387 standard; DNA; 20
                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (INGE-) INGENIUM PHARM AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mudde G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-449493/42.
                                                                                                                                                                                                                                                                                                           WO2004020619-A1.
                                                                                                         29-JUL-2004
                                                                                                                                                                                                                                                                         Mus musculus
                                                                                                                                                                                                                                                                                                                                            11-MAR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Constien R,
                                                                       AD080387;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
RESULT 594
                  ADO80387/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a compound targeted to a nucleic acid molecule encoding huntingtin interacting protein 1, HIPI. The compound, 98-80 nucleobases in length, is an antisense oligonucleotide, where the compound specifically hybridises with the nucleic acid molecule encoding huntingtin interacting protein 1 comprising a sequence appearing as ADN01766 and inhibits the expression of huntingtin interacting protein 1 protein 1 in cells or tissues, screening for a modulator of huntingtin interacting interacting protein 1, a diagnostic method for identifying a disease interacting protein 1, a diagnostic method for identifying a disease animal having a disease or condition associated with huntingtin interacting protein 1 compound so that expression of huntingtin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New compound that modulates huntingtin interacting protein 1 expression, useful in treating an animal having a disease or condition involving dysregulation of cellular apoptosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             interacting protein 1 compound so that expression of huntingtin interacting protein 1 is inhibited. The compound and the methods are useful in treating an animal having a disease or condition involving dysregulation of cellular apoptosis e.g. Huntington's disease. The HIPI gene is located on chromosome 7q11.23. The present sequence is an antisense oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.8; DB 1; Length 20;
18.9%; Pred. No. 6.8e+02;
Ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 987 GCCCCAGAACCTGCTCAT 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 88.98,
'...hos 16; Conservative
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Gaps

.. 0

2; Indels

652 GCCACCGTCTACAAAGGC 669

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16; Conservative

Local Similarity

Best Loca Matches

GCCACCGTTTACAAAGAC

19

ADN01780 standard; DNA; 20

RESULT 595

29-JUL-2004 (first entry)

ADN01780;

ADNO1780 ID ADNO XX AC ADNO XX DT 29-JI

RESULT 596

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transplant rejection; immune system; rheumatoid arthritis; lupus;
inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
                                                                                                                                                                                     (EXPR-) EXPRESSION DIAGNOSTICS INC.
                                                                                                                                                                                                              Woodward R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1120 CIGCITGGGTCCACGGAC 1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
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                                                                                                                                                 24-APR-2002; 2002US-00131831
20-DEC-2002; 2002US-00325899
                                                                                                                       24-APR-2003; 2003WO-US012946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX09234 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-MAR-1999 (first entry)
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                                                                                                                                                                                                                                                       WPI; 2004-400724/37
                                                                                                                                                                                                                 Wohlgemuth J, Fry
Rosenberg S;
                                                                       WO2004042346-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9820165-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                  21-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX09234;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a compound targeted to a nucleic acid molecule encoding huntingtin interacting protein 1, HIP1. The compound, 8-80 concound specifically thybridises oligonucleotide, where the compound specifically hybridises with the nucleic acid molecule encoding compound specifically hybridises with the nucleic acid molecule encoding thurtingtin interacting protein 1 comprising a sequence appearing as huntingtin interacting protein 1 compound and huntingtin interacting protein 1.

ADN01766 and inhibits the expression of huntingtin interacting protein 1, a diagnostic method for a modulator of huntingtin interacting protein 1, a diagnostic method for identifying a disease interacting protein 1 compound so that expression of huntingtin interacting protein 1 is inhibited. The compound and the methods are interacting protein 1 is inhibited. The compound and the methods are interacting protein 1 is inhibited. The compound and the methods are conference of content of condition involving cuseful in treating an animal having a disease or condition involving capter is located on chromosome 77411.23. The present sequence is an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                            New compound that modulates huntingtin interacting protein 1 expression, useful in treating an animal having a disease or condition involving dysregulation of cellular apoptosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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0
                                                                                                                                Human, antisense; ss; Huntingtin interacting protein 1; HIP1; cellular apoptosis; Huntington's disease; chromosome 7q11.23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 5 A; 3 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                                        Human HIP1 antisense target sequence ISIS168101.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Set 2 right PCR primer for marker probe #162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene is located on chromosome 7q11.23. The antisense target region from the HIP1 cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 15; SEQ ID NO 96; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            987 GCCCCAGAACCTGCTCAT 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 GCCCACATCCTGCTCAT 3
                              ADN01858 standard; cDNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88.9%;
                                                                                                                                                                                                                                                     11-NOV-2002; 2002US-00293864.
                                                                                                                                                                                                                                                                               11-NOV-2002; 2002US-00293864.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
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Matches 16; Conservative
                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADP12056 standard; DNA;
                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                           WPI; 2004-374983/35
                                                                                                                                                                                                        US2004092465-A1.
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                                                                                                                                                                               Homo sapiens.
                                                                                     29-JUL-2004
                                                                                                                                                                                                                                13-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADP12056;
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                                                                                                                                                                                                                                                                                                                                     Dobie KW;
                                                             ADN01858;
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1D ADP12
XX
AC ADP1:
XX
XX
XX
XX
XX
DT 12-A:
XX
XX
                        ADN01858/c
ID ADN018
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The present invention relates to diagnosing or monitoring transplant crejection, e.g. cardiac or kidney transplant rejection, in an individual comprises detecting the expression level of one or more genes. The comprises detecting the expression level of one or monitoring methods, system and kits are useful in diagnosing or monitoring cransplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic salet, lung, bone marrow or stem cell transplant rejection, in an experimental rejection or mechanical organ replacement rejection, in an an individual. The method is also useful in diagnosing and monitoring an individual. The methods are also useful in diagnosing and monitoring contain, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or viral, bacterial or fungal infection. The present sequence represents a viral, bacterial or fungal infection. The present sequence represents a primer for a 50 mer oligonucleotide marker for diagnosis and monitoring of allograft rejection and other disorders.
                                                                                                                                                                                                            Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic islet, lung, bone marrow or stem cell transplant rejection, in an individual, comprises detecting the expression level of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Polymorphism; biallelic; human; forensic; paternity testing; disease; detection; phenotypic typing; characteristic; infection; hereditary; autoimmune disease; cancer; inflammation; drug; therapy; medicament; treatment; marker; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
Morris M;
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88.9%; Pred. No. 6.8e+02;
ive 0; Mismatches 2; Indels
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         Prentice J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
         Ly N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 58; SEQ ID NO 2065; 1762pp; English.
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AAX09121-X10268 are allele-specific oligonucleotide primers used in the isolation of various biallelic polymorphic markers found in the human genome (represented in AAX10269-X12937). These primers can be used in action of actermining polymorphic forms in an individual for use in e.g. method for determining polymorphic forms in an individual for use in e.g. of orensics, paternity testing or for phenotypic typing for use in e.g. as agammaglobulinemia, diabetes insipidus, lesch-Nyhan syndrome, muscular hypercholesterolemia, polycystic kidney disease, femilial spherocytosis, von Willebrand's disease, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary camenrhagic telangiectasia, familial colonic polyposis, Bhers-Danlos syndrome, osteogenesis imperfects, acute intermittent prophyria, cystem, infection by pathogenic microorganisms, and characteristics such endurance, fertility, and susceptibility or receptivity to particular colonic centures can also be used to produce medicaments for the treatment or reconstruction or receptivity to particular constructions and pathogenic microorganisms, and characteristics such endurance, fertility, and susceptibility or receptivity to particular constructions and pathogenic medicaments for the treatment or recent medicament or recent medicament or
                                                                                                                                                                                                                                                                                                  New isolated nucleic acid segments from the human genome - used for determining polymorphic forms for use in e.g. forensics, paternity testing or phenotypic typing for disease.
                                                                                                                                                             (WHED ) WHITEHEAD INST BIOMEDICAL RES.
                                                                                                                                                                                                                                                                                                                                                                                              Claim 15; Page 59; 310pp; English.
                                                                                                                                                                                                                Wang D, Hudson T;
                                                                           97WO-US020313,
                                                                                                                         96US-0030455P.
                                                                                                                                                                                                                                                           WPI; 1998-286974/25.
                                                                   05-NOV-1997;
                                                                                                                 06-NOV-1996;
                        14-MAY-1998
                                                                                                                                                                                                                ES
                                                                                                                                                                                                           Lander
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Gaps .; 0 ch 0.8%; Score 14.8; DB 1; Length 21; 1 Similarity 88.9%; Pred. No. 7.1e+02; 16; Conservative 0; Mismatches 2; Indels Sequence 21 BP; 1 A; 9 C; 0 G; 11 T; 0 U; 0 Other; 843 18 826 TCCCTCACCCTTGTCTTT TTCCTCACCCTTTTCTTT Local Similarity Query Match Matches ð a

. 0

ss; cancer; PCR; Northern blotting; ribonuclease protection assay; diagnosis; metastatic cancer; primer; amplification. Cancer associated gene primer 16. BP AAV43747 standard; DNA; 21 (first entry) 16-NOV-1998 Synthetic. AAV43747; 

98WO-JP000667. 97JP-00052508. WO9837187-A1 18-FEB-1998; 21-FEB-1997; 27-AUG-1998.

(TAKI ) TAKARA SHUZO CO LID,

The primers AAV43732-V43776 were to produce cancer associated gene fragments which can be used to detect cancer cells in tissue samples or biological fluids. They are detected by monitoring the change in mRNA expression as compared to normal tissue of one or more cancer-associated genes whose cDNA stringently hybridises to the nucleic acid fragments. The change in expression may be an increase or a decrease compared to normal tissue. The mRNA expression may be determined by PCR, Northern in the amount of protein encoded by the gene(s) as compared to normal tissue, for example by using a labelled antibody recognising the protein. Detection of cancer cells for cancer diagnosis, including detection of metastatic cancer cells in tissues other than the primary tumour site Detection of cancer cells in tissue samples - by changes in mRNA expression compared to normal tissue of specific cancer-associated gene Kato I; Sequence 21 BP; 9 A; 7 C; 2 G; 3 T; 0 U; 0 Other; Hino F, Disclosure; Page 71; 92pp; Japanese. Asada K, Yoshikawa Y, Mukai H, WPI; 1998-467552/40. sednences. 

Score 14.8; DB 1; Length 21; Pred. No. 7.1e+02; Indels 0; Mismatches 1311 GACATACAACTACCCCAA 1328 2 GAAACACAACTACCCCAA 19 Human polymorphic region 419. Match Local Similarity 88.9%; AAZ26230 standard; DNA; 21 30-NOV-1999 (first entry) 16; Conservative AAZ26230; Query Match Matches RESULT 600 AAZ2623(

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Gaps

0;

Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH; cell viablity; loss of heterozygosity; precancerous condition; ASI; allele specific inhibitor; somatic cell; diagnosis; prevention; atherosclerotic plaque; premalignant metaplastic lesion; endometriosis; dysplastic lesion; benign tumour; polycystic kidney disease; transplant; graft versus host disease; malignant cell removal; bone marrow; ss. Stanton VP; 98WO-US005419. 97US-0041057P (VARI-) VARIAGENICS INC Ledley FD, WPI; 1998-521232/44. 19-MAR-1998; Homo sapiens 20-MAR-1997; WO9841648-A2 24-SEP-1998. Housman D, 

Identifying target genes for allele-specific drugs - used for diagnosis, prevention and treatment of, e.g. cancers, atherosclerotic plaque, dysplastic lesions, endometriosis or graft versus host disease. Disclosure, Fig 7; 605pp; English. The inhibitor is

subject to loss of heterozygosity (LOH) in a cancer.

used for preventing the development of cancer in a patient having a used for preventing the development of cancer in a patient having a precancerous condition, by administering to the patient a first allele specific inhibitor (ASI) targeted to an allele of a first essential gene present in cells of the precancerous condition, where the normal somatic cells of the patient are heterozygous for the first gene, the inhibitor is active on at least one but less than all allelic forms of the gene present in a population and targets only one allelic form present in the normal somatic cells, and the first gene. The products and methods can be normal somatic cells, prevention and treatment of LOH disorders, e.g. cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic lesions, benign tumours, endometriosis, polycystic kidney disease, and alignant cells from bone marrow transplants. AZZS812-ZZ6825 represent malignant cells from bone marrow transplants.

malignant cells from bone marrow transplants. AAZ25812-Z26825 represent human polymorphic sites described in the method of the invention

Sequence 21 BP; 7 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

0.8%; 88.98;

Best Local Similarity 88.9 Matches 16; Conservative

Query Match

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This invention describes a novel method for identifying an inhibitor potentially useful for treatment of cancer, where the inhibitor is active on a gene vital for cell growth or viability, and where the gene is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Identifying target genes for allele-specific drugs - used for diagnosis, prevention and treatment of, e.g. cancers, atherosclerotic plaque, dysplastic lesions, endometriosis or graft versus host disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure, Fig 7; 605pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                98WO-US005419.
                                                                                                                                                                                                                                                                                                                                                                                                                                              97US-0041057P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              (VARI-) VARIAGENICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Housman D, Ledley FD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-521232/44.
                                                                                                                                                                                Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                20-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                  WO9841648-A2
                                                                                                                                                                                                                                                                                                                                                                                                                 24-SEP-1998.
                                                                                                                                                                                                                                                                              AAZ26229;
                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                               RESULT 601
                                                                                                                                                                                        Matches
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Human LPIN1 gene PCR primer, SEQ ID NO:9.

26-FEB-2004 (first entry)

BP.

ADG27367 standard; DNA; 21

RESULT 602 ADG27367,

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This invention describes a novel method for identifying an inhibitor of potentially useful for treatment of cancer, where the inhibitor is active on a gene vital for cell growth or viability, and where the gene is cused to reventing the development of cancer. The inhibitor is precancerous condition, by administering to the patient a first allele specific inhibitor (ASI) targeted to an allele of a first essential gene present in cells of the precancerous condition, where the normal somatic cells of the patient are heterozygous for the first gene, the inhibitor (SI) active on at least one but less than all allelic forms of the gene present in a population and targets only one allelic forms of the gene or at least one but less than all allelic forms present in the present of an expension of the first gene. The products and methods can be normal somatic cells, and the first gene. The products and methods can be cancers, atherosolerotic plaques, premalignant metaplastic or dysplastic cancers, and to send the disease, premalignant metaplastic or dysplastic graft versus host disease. The method can also be used to remove malignant cells from bone matrow transplants. AMZSS112-226825 represent humans of the distribution of the method can also be used to remove the matrow transplants.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human polymorphic sites described in the method of the invention
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Pred. No. 7.18+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 6 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         991 CAGAACCTGCTCATCAAC 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAZ26229 standard; DNA; 21 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human polymorphic region 418.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        88.9%;
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Gaps

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Score 14.8; DB 1; Length 21; Pred. No. 7.18+02; 0; Mismatches 2; Indels

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The invention relates to mouse Lpin1 and human LPIN1 nucleic acids (ADG27386-ADG27387) and the proteins they encode (ADG27361-ADG27363). The Lpin1/LPIN1 gene encodes a novel nuclear protein called lipin 1, which is highly expressed in adipocytes and plays a key role in adipocyte maturation and metabolism. In mice, mutations in the Lpin1 gene are responsible for the fatty liver dystrophy phenotype (fld) which exhibits characteristics of human lipodystrophy. Lipin 1 proteins, and the related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New mouse Lpin1 and human LPIN1 genes associated with adiposity/insulin response regulation, useful for screening agents that alter adipose tissue development, or for diagnosing a predilection to lipodystrophy,
                                                                                                                        Human; LPIN1; chromosome 2p21; lipin 1A; adipocyte maturation; adipocyte metabolism; adipose tissue development; transgenic animal; diagnosis; drug screening; fat accumulation inhibition; lipodystrophy; obesity; diabetes; atherosclerosis; insulin response; antilipaemic; anorectic; antidiabetic; antiarteriosclerotic; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 26; SEQ ID NO 9; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                 20-DEC-2001; 2001WO-US050237.
                                                                                                                                                                                                                                                                                                                                                                                22-DEC-2000; 2000US-0257772P.
                                                                                                                                                                                                                                                                                                                                                                                                                   (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              obesity or diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-599767/64
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peterfy M;
                                                                                                                                                                                                                                                                            WO200259248-A2.
                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                01-AUG-2002.
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Stanton VP;

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proteins encoded by the Lpin2 and Lpin2 genes, contain two strongly conserved regions designated N-terminal and C-terminal lipin (NLIP and CLIP) domains. The invention also encompasses a method of screening for agents which modulate lipin 1 activity or expression, thereby altering adipose tissue development, a transgenic animal that lacks a functional confibin 1 protein; a method of identifying a predisposition to developing one or more symptoms of lipodystrophy, obesity, diabetes or atherosclerosis, a method of mitigating a symptom of lipodystrophy, cossity, diabetes, atherosclerosis, or related pathology by modulating lipin 1 activity or expression. The Lpin1 nucleic acid are useful for screening agents that alter adipose tissue caveloping one or more symptoms of lipodystrophy, obesity, diabetes or atherosclerosis. Agents which modulate lipin 1 activity or expression con caveloping one or more symptoms of lipodystrophy, obesity, diabetes or atherosclerosis. Agents which modulate lipin 1 activity or expression are useful for inhibiting fat accumulation in a mammal, or for regulating and insulin response. The present sequence is related to the invancion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21 BP; 6 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
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Score 14.8; DB 1; Length 21; Pred. No. 7.1e+02; 0; Mismatches 2; Indels 0.8%; Best Local Similarity Query Match Matches

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Gaps

. 0

Indels

0; Mismatches

16; Conservative

1466 m 20 ACATTCATTCTGCCTCAG 1449 ACATCCATTCTTCCTCAG à d

ABZ76238 standard; DNA; 21 

(first entry) 12-JUN-2003

Murine chemokine receptor CCR1 specific RT-PCR reverse primer.

CCR1; renal fibrosis; chemokine receptor; antiinflammatory; nephrotropic; collagen; mouse; RT-PCR; primer; ss.

ds snw

WO2003013656-A2.

20-FEB-2003

05-AUG-2002; 2002WO-US024763.

07-AUG-2001; 2001US-0310538P. 26-JUL-2002; 2002US-00205713.

(SCHD ) SCHERING AG

Horuk R;

WPI; 2003-278443/27.

Composition for treating progressive renal fibrosis comprises non-peptide chemokine CCR1 receptor antagonist, especially arylmethylpiperazine derivative.

Example 6; Page 23; 43pp; English.

The invention relates to a composition for treating progressive renal fibrosis in mammals (preferably humans) and involves a non-peptide chemokine CCR1 receptor antagonist. The compositions are useful for treating progressive renal fibrosis in humans and in cats, dogs, pigs, cattle, sheep, goats, horses and rabbits. Sequences ABZ76231-245 represent oligonucleotide primers and probes used in an in vivo assay of chemokine receptor and collagen I mRNA expression

. 0

Gaps

0

Score 14.8; DB 1; Length 21; Pred. No. 7.1e+02; 0; Mismatches 2; Indels

ch 0.8%; 1 Similarity 88.9%; 16; Conservative

Query Match Best Local Similarity Matches 16; Conserv

Sequence 21 BP; 3 A; 5 C; 10 G; 3 T; 0 U; 0 Other;

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This invention relates to novel isolated nucleic acid molecules, and encoded proteins thereof, for epothilone B hydroxylase (ebb).

Specifically, it refers to recombinant microorganisms expressing ebb, commants and/or ferredoxin, which are capable of hydroxylating small compounds produced by Sornangium cellulosum, which have been shown to exert microtubule stabilising effects similar to pacilitaxel such that they have cytotoxic activity against rapidly proliferating cells.

CC common activity against rapidly proliferating cells.

CC they have cytotoxic activity against rapidly proliferating cells.

Accordingly, they are natural anticancer agents with neuroprotective, virucidal, antilinflammatory and osteopathic activities. The present invention describes epothilones and analogues thereof as useful for treating cancers, inhibiting angiogenesis and treating blindness related to retinal vascularisation. Furthermore, they can be used for conditions including aplastic anaemia, restenosis, Alzheimer's disease, systemic concluding aplastic anaemia, restenosis, Alzheimer's disease, systemic collupies erythmatosis and AIDS. This oligonucieotide sequence (SeqID II) is derived from a bacterial cytochrome P450 gene (locus STMSUACB) and used concerns concluding genomic epothilone B hydroxylase DNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               eph
                                                                                                                                                                                                                                                                                                                                                                                Bacterial cytochrome P450 oligo used to design PCR primers (SeqID 11).
                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                    epothilone B hydroxylase; ebh; macrolide; microtubule stabilising; cytotoxic; anticancer; neuroprotective; virucidal; antiinflammatory; osteopathic; cancer; angiogenesis; retinal vascularisation; applastic anaemia; restencis; Alzheimer's disease; systemic lupus erythmatosis; Alzheimer's disease;
                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel epothilone B hydroxylase polypeptide, and mutants of the polypeptide which is useful for producing a epothilone analog.
                                                             Length 21;
                                                                                                   2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ľ
               Sequence 21 BP; 2 A; 7 C; 4 G; 8 T; 0 U; 0 Other;
                                                         0.8%; Score 14.8; DB 1;
88.9%; Pred. No. 7.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sun X,
                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; SEQ ID NO 11; 127pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nayeem A,
                                                                                                                                       871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BRIM ) BRISTOL-MYERS SQUIBB CO.
                                                                                                                                                                                                                                                                           ВЪ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-DEC-2002; 2002WO-US040359.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Liu S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-DEC-2001; 2001US-0344271P.
                                                                                                                                     854 ACAAGGACCTGAAGCAGT
                                                                                                                                                                         21 ACAAGAGCCTGAAGCAGT
                                                                                                                                                                                                                                                                     ADD15228 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chiang S,
                                                 Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003057830-A2
                                                                                             16;
                                                                                                                                                                                                                                                                                                                                               15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUL-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Basch JD,
                                                                                                                                                                                                                                                                                                             ADD15228;
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                                                                                             Matches
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XX OS
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Gaps

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Indels

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Sequence 21 BP; 5 A; 4 C; 4 G; 2 T; 6 U; 0 Other;
                                                                         WO2003074654-A2.
                                                                                                               15-JAN-2003;
                                                                Unidentified.
                                                                                                     29-AUG-2002;
05-SEP-2002;
                                                                                                            09-SEP-2002;
                                                                                            .2002;
                                                                                                   06-JUN-2002;
                                                                                               11-MAR-2002;
                                 26-FEB-2004
                                                                                12-SEP-2003
                                                                                                                               Jamison S,
                                                                                                                           Mcswiggen
                                                                    Synthetic.
                                                                                                                                                    activity
                           ADG29735;
               605
                  ADG29735/
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The invention relates to a double-stranded short interfering nucleic acid (siMA) molecule that down-regulates expression of an endogenous mammalian target gene comprising one or more chemical modifications and each strand of the double-stranded siNA comprises about 21 nucleotides. The siNA of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New double-stranded short interfering nucleic acid molecule, useful for down-regulating the expression of an endogenous mammalian target gene or for treating diseases that respond to modulation of gene expression or activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diseases such as restenosis, atherosclerosis, Alzheimer's disease, Parkinson's disease, epilepsy, dementia, huntington's disease or amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for gene therapy applications. The current sequence is that of the siNA DNA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the invention demonstrates antiarteriosclerotic, neuroprotective, nootropic, antiparkinsonian and anticonvulsant activities and may be useful for down-regulating the expression of an endogenous mammalian trarget gene and therefore in the treatment of any disease or condition that responds to modulation of gene expression or activity in a cell, tissue or organism. The disease or condition may include pulmonary
                                                                                                                                                                                                                                                                                                                                                                                              antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian; anticonvulsant; pulmonary disease; restenosis; atherosclerosis; Alzheimer's; Parkinson's; epilepsy; dementia; huntington's; amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; CDK2.
                                                                                                                                                                                                                                                                                                                                                                                double-stranded short interfering nucleic acid; siNA;
                                                                                                                                                                                                                                                                                                                                   CDK2-targeted siNA DNA-RNA hybrid - SEQ ID 297.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 24; SEQ ID NO 297; 593pp; English.
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Beigelman L, Chowrira B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Thompson J;
                                            1022 TCAAGCTGGCTGACTTTG 1039
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SIRN-) SIRNA THERAPEUTICS INC
                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2002US-0406784P.
2002US-0408378P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2002US-0363124P.
2002US-0386782P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2002US-0409293P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-FEB-2003; 2003WO-US005028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2002US-0358580P
                                                                                         18 TCAAGCTAGCAGACTTTG
                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                              (first entry)
  Conservative
                                                                                                                                                                                                     ADG29731 standard; RNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-731676/69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003074654-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-MAR-2002;
06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mcswiggen J,
Jamison S, L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-SEP-2002;
                                                                                                                                                                                                                                                                                                26-FEB-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .2-SEP-2003
    16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                   ADG29731;
    Matches
                                                                                                                                                             RESULT 606
                                                                                                                                                                                    ADG2973
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                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a double-stranded short interfering nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (siNA) molecule that down-regulates expression of an endogenous mammalian target gene comprising one or more chemical modifications and each strand of the double-stranded siNA comprises about 21 nucleotides. The siNA of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             that responds to modulation of gene expression or activity in a cell, tissue or organism. The disease or condition may include pulmonary diseases such as restenosis, atherosclerosis, Albreimer's disease, parkinson's disease, epilepsy, dementia, huntington's disease or amyotrophic lateral sclerosis. Furthermore, the siNA may be utilised for gene therapy applications. The current sequence is that of the siNA DNA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New double-stranded short interfering nucleic acid molecule, useful for down-regulating the expression of an endogenous mammalian target gene or for treating diseases that respond to modulation of gene expression or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the invention demonstrates antiarteriosclerotic, neuroprotective, noetropic, antiparkinsonian and anticonvulsant activities and may be useful for down-regulating the expression of an endogenous mammalian target gene and therefore in the treatment of any disease or condition
                                                                                                                                                                                                                                                                                                                                                               double-stranded short interfering nucleic acid; siNA; antiparkinsonian; antiarteriosclerotic; neuroprotective; nootropic; antiparkinsonian; anticonvulsant; pulmorary disease; restenosis; atherosclerosis; Alzheimer's; Parkinson's; epilepsy; dementia; huntington's; amyotrophic lateral sclerosis; gene therapy; ss; DNA-RNA hybrid; CDK2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fosnaugh K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pavco P,
                                                                                                                                                                                                                                                                                                                            CDK2-targeted sina DNA-RNA hybrid - SEQ ID 301.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 24; SEQ ID NO 301; 593pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Beigelman L, Chown
man N, Thompson J;
                                     1218 CACGGTGGAGGAACAGCT 1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (SIRN-) SIRNA THERAPEUTICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
2002US-0409293P.
                                                                               21
                                                                                                                                                                                              ВР.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-FEB-2003; 2003WO-US005028
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                                                                             ceceeresassascrect
                                                                                                                                                                                           ADG29735 standard; RNA; 21
                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              J, Bers
Tusman N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-731676/69.
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Fosnaugh K;

Pavco P,

0.8%; Score 14.8; DB 1; Length 21;

Sequence 21 BP; 6 A; 4 C; 4 G; 2 T; 5 U; 0 Other;

Query Match

0.8%; Score 14.8; DB 1; Length 21; 88.9%; Pred. No. 7.1e+02;

Query Match Best Local Similarity

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Gaps
                     ..
0
Pred. No. 7.1e+02;
                  5; Mismatches
                                   1022 TCAAGCTGGCTGACTTTG 1039
         61.1%;
                 Conservative
       Best Local Similarity
                Matches
                                   ð
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UCAAGCUAGCAGACUUUG 19

g

RESULT 607

ADJ97606 standard; DNA; 21 ADJ97606/

BP.

(first entry) 06-MAY-2004 ADJ97606;

Human Flt-1 DNA sequence, a target for siRNA inhibition SeqID 379.

age-related macular degeneration; inflammatory disease; psoriasis; rheumatoid arthritis; cancer; breast; retinoblastoma; Wilm's tumour; lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory; antipsoriatic; antirheumatic; antiarthritic. human, ss, short interfering RNA; siRNA; angiogenesis, vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1; Flk-1/KDR; kinase domain region; diabetic retinopathy;

Homo sapiens.

WO2004009769-A2.

29-JAN-2004.

.8-JUL-2003; 2003WO-US022444

24-JUL-2002; 2002US-0398417P

14-NOV-2002; 2002US-00294228

(UYPE-) UNIV PENNSYLVANIA.

Folentino MJ, Reich SJ;

WPI; 2004-203472/19.

Novel short interfering RNA (siRNA) comprises sense and antisense RNA strands, useful for inhibiting expression of human vascular endothelial growth factor mRNA, for treating angiogenic disease, e.g. diabetic retinopathy and cancer.

Disclosure; SEQ ID NO 379; 218pp; English.

This invention relates to novel compositions that comprise short interfering RNA (siRNA) molecules, which can be used to inhibit or angiogenesis. Specifically, it refers to siRNAs that target and cause RNA-induced degradation of mRNA from human vascular endothelial growth factor (VEGF), the VEGF receptor (FIL-1) and the FIR-1/KDR (kinase domain ceging) genes, as well as mutants derived thereof. The present invention describes sense and antisense RNA strands that form an RNA duplex and bind to the target mRNA, such that expression is inhibited and the target degraded. As such, siRNA administered in combination with a therapeutic agent is useful for treating disease associated with angiogenesis and related macular degeneration, inflammatory disease, psoriasis and rhemmatoid archritis. Furthermore, it can be used to treat various cancers including breast, retinoblastoma, wilm's tumour and lymphoma. Accordingly, hase compositions exhibit cytostatic, antidiabetic, ophthalmological, antiinflammatory, antipsoriatic, antidiabetic antiarthritic activities. This oligonucleotide is a human FIL-1 DNA very 

Sequence 21 BP; 10 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

0.8%; Score 14.8; DB 1; Length 21; 88.9%; Pred. No. 7.1e+02; Query Match Best Local Similarity

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Gaps

· 0

0.8%; Score 14.8; DB 1; Length 21; 88.9%; Pred. No. 7.1e+02; ve 0; Mismatches 2; Indels

Query Match
Best Local Similarity 88.9%;
Marches 16; Conservative

This sequence corresponds to an example of a primer of the invention

Sequence 21 BP; 2 A; 6 C; 8 G; 5 T; 0 U; 0 Other;

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The invention relates to a method of designing primers for simultaneous amplification of target DNA fragments in a single multiplex polymerase contain reaction by aligning a first primer and a second primer. The method comprises: (a) aligning a first primer and a second primer; and (b) contain four or more bases that are perfectly matching to the 3' end does not contain four or more bases that are perfectly matching to the 3' end sequence of the first primer at its 3' end does not contain seven or more bases that are perfectly matching except one mismatch to the 3' end sequence of the first primer at its 3' end does not contain six or except one mismatch to the 3' end sequence anywhere of the first primer at its 3' end does not contain eleven or more bases that are perfectly matching except first primer at the second primer, the first primer at its 3' end does not contain eleven or more bases that are perfectly matching except cone mismatch to a sequence anywhere of the first primer at its 3' end does not contain eleven or more bases that are perfectly matching except cone mismatch to a sequence anywhere of the first primer at its 3' end does not contain eleven or more bases that are perfectly matching except cone mismatch to a sequence anywhere of the first primer or the second primer. The method is useful for designing primers for simultiple genes amplification of target DNA fragments in a single multiple genes confirming in various samples and high throughust genotyping tenchyping containing in various samples and high throughust genotyping the propertion of the invention of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Designing primers for simultaneous amplification of target DNA fragments in a single multiplex polymerase chain reaction, for high throughput multiplex DNA sequence amplification, comprises aligning two primers.
                                                                                                                                                                                                                                                                                                                                                                                                               ss; primer; simultaneous amplification; single multifactorial disease; single multiplex polymerase chain reaction; multifactorial disease; genetic alteration; pharmacogenetic reaction; genotyping; polymorphism;
       Gaps
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     Indels
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0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                   Single multiplex PCR primer #1754.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-OCT-2002; 2002US-0417009P.
                                                                             20 ATTTCCATATTTGCAGTA
                                              1501 ACTICCATATITGCACTA
                                                                                                                                                                                                                     ADO12382 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene expression profiling
16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                       608
Matches
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AAT92763 standard; DNA; 22

RESULT 610 AAT92763 AAT92763;

(first entry)

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ART02480-T02483 are amplification primers for regions of the DNA reverse transcribed by the sequence represented in AAT02479. This sequence is a sense primer corresponding to a region of domain D of the retinoid X receptor (RXR) beta gene and was used as a control. The DNA was obtained from transgent mice that had a mutation in the RXR alpha gene. RXR is a member of the steroid/thyroid receptor superfamily. By mutating the DNA binding domain sequence in one of the steroid/thyroid receptors (e.g. the retinoid X receptor) of a mouse, a transgenic mouse expressing less than be created. The transgenic mouse can then be used as a model for superfamily in development and physiology. RXR-alpha-deficient mice created in this manner allow for molecular dissection of ventricular development who mice mice in the second of ventricular development.
                                                                                                                                                                                                                                                                            Steroid/thyroid receptor superfamily; DNA-binding domain; transgenesis; retinoid X receptor; transgenic mouse; development; physiology; therapy; RXR-lpha-deficient; ventricular chamber development; ischaemia; RXR; cardiac hypertrophy; polymerase chain reaction; primer; amplify; PCR; reverse transcriptase; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Transgenic mice expressing low levels of steroid-thyroid receptors - useful for study of role of steroid-thyroid receptors in embryogenesis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chamber development. The mice are also useful for determining the selectivity of a ligand for a steroid/thyroid receptor. The retinoid compounds identified can be used for treating cardiac hypertrophy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.8; DB 1; Length 22; 88.9%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                  Primer for domain D of the retinoid X receptor beta gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 22 BP; 2 A; 11 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ischaemia and other cardiac malfunctions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      useful for study of role of steroid-the.g. RXR alpha in cardiac development.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (SALK ) SALK INST BIOLOGICAL STUDIES. (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 4; Page 20; 41pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chien KR;
406 TCTCCAGTGAGAGTGCGT 423
                                      4 rerecagreaderegir 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.8%;
Best Local Similarity 88.9%;
                                                                                                                                      AAT02483 standard; DNA; 22 BP
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                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                    13-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                            AAT02483;
                                                                                                    RESULT 609
                                                                                                                        AAT02483/c
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AAT92758-T92817 represent amplification primers for human genes which are used in the chimeric non-human animal of the invention. The chimeric non-human animal of the invention, preferably a mouse, contains a foreign chromosome (s) or chromosome (ragment. The animal is produced by obtaining chromosome (s) or chromosome fragment. The animal is produced by obtaining characteristic call by fusion of a cell containing the foreign chromosome with call having the ability to form microcells. The microcells are corresponded and fused with cells having differentiative pluripotency to prepared, and fused with cells having differentiative pluripotency to chromosome. These cells are then introduced into an embryo, which is then chromosome segment to term. The foreign chromosome segment is at least implanted and brought to term. The foreign chromosome segment is at least chromosome segment could also contain genes associated with human consume segment could also contain genes associated with human consume activation of foreign genes (sepecially human genes) in a non-confirm animal is useful for efficient production of proteins, especially confirmed animal is useful for efficient production of proteins, especially confirmed and fused with a non-confirme cells to produce hybridomas capable of expressing the foreign penetic material can be isolated and fused with
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                                                                                                     PCR primer; amplify; human gene; chimeric non-human animal; antibody; transgenic mouse; chromosome fragment; hybridoma production; microcell; Huntington's disease gene; pluripotent cell; interleukin-2 gene; myeloma cell; immunoglobulin; variable region; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chimeric animal containing foreign chromosome - for expression of a foreign gene, e.g. an antibody.
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                                                                  Primer #2 for immunoglobulin kappa variable region Vkappa3-2.
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88.9%; Pred. No. 7.4e+02;
ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ishida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oshimura M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1; Page 21; 142pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene (e.g. to produce the antibody)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hanaoka K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           356 CTGATGGGGAGAGTGACC 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADG77192
ID ADG77192 standard; DNA; 22 BP.
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96JP-00027940.
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                                                                                                                                                                                                                                                                                                                                                   96WO-JP002427.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ľomizuka K, Yoshida H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    (KIRI ) KIRIN BEER KK.
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                                                                                                                                                                                                                                                                        W09707671-A1.
                                                                                                                                                                                                                                                                                                                                                     29-AUG-1996;
                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                         29-AUG-1995;
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                                                                                                                                                                                                                                                                                                                 06-MAR-1997.
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2; Indels

0; Mismatches

31 CAGAGGTAGGCAGGAGGA 48

Conservative

16;

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8 g

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22 CAGAGGTAGGGAGGAGAA

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This invention relates to novel oligonucleotide PCR primers which may be used to identify markers associated with genetic diseases and traits in phose, in particular to diagnose genetic diseases that are not phenotypically visible and to identify carriers of recessive diseases. A specific application is diagnosis of copper toxicosis (CT). The invention can also be used to create a genetic map of the canine genome; to generate breed-specific profiles, to establish paternity and to identify dogs from DNA fingerprints. The method provides rapid analysis of the target sequences from only a small sample of DNA. Diagnosis can be done at any time in the dog's life. The present sequence is that of a PCR
                                                                                                                                                                                                                                                                                                  New oligonucleotide primers for diagnosis of genetic diseases and traits in dogs - amplify specific regions of the genome containing microsatellite repeats, especially for diagnosing copper toxicosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pluripotent cell; intrinsic gene; chimeric non-human animal; construction; human; antibiotic gene; cancer cell; embryonic; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 14.8; DB 1; Length 22;
Pred. No. 7.4e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 22 BP; 5 A; 6 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Immunoglobulin kappa variable PCR primer Vk3-2 #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tomizuka K, Yoshida H, Hanaoka K, Oshimura M,
                                                                                                                                                                                                                             Yuzbasiyan-Gurkan V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1723
                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 12; 40pp; English.
                                                                                          97WO-US002396.
                                                                                                                              96US-0012060P.
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les 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      primer of the invention,
                                                                                                                                                                                                                             Venta PJ,
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                                                                                                                                                                                                                                                                 WPI; 1997-435082/40.
                                                                                        18-FEB-1997;
              WO9731011-A1
                                                                                                                            22-FEB-1996;
                                                  28-AUG-1997
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                                                                                                                                                                                                                                                                                                                                                                carriers.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention relates to novel oligonucleotide PCR primers which may be used to identify markers associated with genetic diseases and traits in dogs, in particular to diagnose genetic diseases that are not phenotypically visible and to identify carriers of recessive diseases. A specific application is diagnosis of copper toxicosis (CT). The invention can also be used to create a genetic map of the canine genome; to generate breed-specific profiles; to establish paternity and to identify dogs from DNA fingerprints. The method provides rapid analysis of the target sequences from only a small sample of DNA. Diagnosis can be done at any time in the dog's life. The present sequence is that of a PCR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New oligonucleotide primers for diagnosis of genetic diseases and traits in dogs - amplify specific regions of the genome containing microsatellite repeats, especially for diagnosing copper toxicosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                              genetic disease; genetic trait; dog; carrier of recessive disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   genetic disease; genetic trait; dog; carrier of recessive disease; copper toxicosis; CT; canine genome map; breed-specific profile; DNA fingerprint; dog identification; PCR; primer; ss.
                                                                                                                                copper toxicosis, CT; canine genome map; breed-specific profile; DNA fingerprint; dog identification; PCR; primer; ss.
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                                                                      Canine disease marker-related PCR primer 36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Yuzbasiyan-Gurkan V;
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(UNMS ) UNIV MICHIGAN STATE.
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                                    (first entry)
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Best Local Similarity
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                                                                                                                                                                                           Canis familiaris
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                                  11-MAR-2004
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ADG77192;
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containing foreign chromosomes or fragments - and non-

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The present invention describes a method of obtaining pluripotent cells containing foreign chromosomes or their fragments (preferably at least containing foreign chromosomes or their fragments (preferably at least containing the foreign chromosomes or fragments, then fusing these cells containing the foreign chromosomes or fragments, then fusing these with pluripotent cells such as embryonic stem cells, embryonic cancer cells or their mutants. Also described are: (1) a method of obtaining hybridoma cells py fusing a cell with a high ability to produce hybridoma cells (such as mouse A9 cells) with a cell containing the foreign chromosomes or fragments (such as normal human diploid cells); (2) a method of utilising pluripotent cells cormal human diploid calls); (2) a method of utilising pluripotent cells corman dispoid can express the foreign chromosomes or fragments contracted and (3) chimeric animals, their offspring and tissues and cells derived from the offspring produced by a method as in (2). The conventions can be used for the production of monoclonal antibodies for the production of monoclonal antibodies for thumans. They can also be used in the production of chimeric and charman type and therefore not antigenic in thumans. They can also be used in the production of chimeric and conventions cans models for the study of human diseases. AAVS22755 to AAVS2828 are proportional antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Foreign chromosome; microcell fusion; homologous recombination; antibody; targeting vector; transgenic animal; disease model; knockout animal; PCR primer; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Producing a cell containing modified foreign chromosomes, useful for the
                                                                     human chimeric animals constructed using them and expressing foreign genes such as human antibiotic genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR primers used in examples from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Primer Vk3-R for human immunoglobulin gene.
                                                                                                                                    Example 1; Page 33; 217pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA10007 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 0.8
Best Local Similarity 88.9
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-246479/21.
                WPI; 1998-480821/41.
                                                        Pluripotent cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200010383-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tomizuka K,
Kuroiwa Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUL-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA10007
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356 CTGATGGGGAGAGTGACC 373

20

BP

(first entry)

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The invention relates to a novel method of producing cells containing a modified foreign chromosome or chromosome fragment. The method comprises:

(a) fusing a microcell comprising the foreign chromosome or chromosome fragment, with a cell having a high efficiency for homologous recombination; (b) marking the desired site of insertion of the foreign chromosome using a targeting vector; and (c) inducing deletion or translocation at the marked site. Transgenic animals produced by the method are useful to provide disease models and knockout animals, and in the production of human proteins, particularly human antibodies. This sequence is used in the method of the invention
                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Foreign chromosome; microcell fusion; homologous recombination; antibody; targeting vector; transgenic animal; disease model; knockout animal;
                                                          The invention relates to a novel method of producing cells containing a modified foreign chromosome or chromosome fragment. The method comprises:

(a) fusing a microcell comprising the foreign chromosome or chromosome fragment, with a cell having a high efficiency for homologous recombination; (b) marking the desired site of insertion of the foreign chromosome using a targeting vector; and (c) inducing deletion or translocation at the marked site. Transgenic animals produced by the method are useful to provide disease models and knockout animals, and in the production of human proteins, particularly human antibodies. This sequence is used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Producing a cell containing modified foreign chromosomes, useful for the
                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Primer 2 for human immunoglobulin kappa variable region gene Vk3-2.
                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ishida I;
                                                                                                                                                                                                                                                                                                Length 22;
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                                                                                                                                                                                                                                                           Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                Score 14.8; DB 1;
Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                 Example 95; Page 180; 316pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Page 55; 316pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hanaoka K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 generation of transgenic animals.
generation of transgenic animals.
                                                                                                                                                                                                                                                                                                                                                                        356 CTGATGGGGAGAGTGACC 373
                                                                                                                                                                                                                                                                                                                                                                                                         3 CTGATGGTGAGAGTGAAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-JP004518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98JP-00236169
                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 88.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA09923 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                        16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primer; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (KIRI ) KIRIN BEER KK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-246479/21
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Kuroiwa Y;
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Gaps

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0.8%; Score 14.8; DB 1; Length 22; 88.9%; Pred. No. 7.4e+02; iive 0; Mismatches 2; Indels

Ishida I;

Oshimura M,

Hanaoka K,

Yoshida H, BEER KK

99WO-JP004518 98JP-00236169

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Sequences AAH37205 - AAH40844 represent PCR primers, single nucleotide

primer extension (SNPB) primers, and the sequences of regions flanking

sites of single nucleotide polymorphisms SNPS. The present invention includes kits for determining the presence or absence of a SNP, using the oligonucleotides of the invention. The PCR primers are used to amplify a soft primer is used as a genotyping primer.

The oligonucleotides are useful for genotyping a nucleic acid sample by exforming a single-nucleotide primer extension reaction. The cligonucleotides are useful for determining the presence, absence or identity of a SNP and for genotyping nucleic acid samples, for e.g. to assess by association analysis the genotype of an individual or group of individuals, having a pathological phenotype of an individual or group of individuals, having a pathological phenotype trait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g. of agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, familial hypercholesteroleamia, polycystic kidney disease, of traits also include symptoms of or susceptibility to multifactorial diseases, including, rheumatoid arthritis, multiple sclerosis, conficuence of assesses, including, rheumatoid arthritis, multiple sclerosis, conficuence in an may be genetic such as autoimmune diseases, including, rheumatoid arthritis, multiple sclerosis, conficuence in a new and infection by pathogenic microorganism. The method is also useful in forensic investigations and containing DNA sequence represents a PCR primer specific
                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                         Single nucleotide polymorphism; SNP; single nucleotide primer extension; SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; Lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia; polycystic kidney disease; osteogenesis; imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                            Gaps
                                                                                          .;
0
                                              Length 22;
                                                                                        Indels
                                            Score 14.8; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 2;
Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                      SNP specific lower PCR primer SEQ ID 2062.
                                                                                                                             356 CTGATGGGGAGAGTGACC 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 60; 83pp; English.
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                                                                                                                                                                                                                                                                                 BP.
                                       0.8%;
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                                                                                                                                                                     3 CTGATGGTGAGAGTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pohl M;
                                                                                                                                                                                                                                                                             AAH39266 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                     Query Match 0.8
Best Local Similarity 88.9
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-0CT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acid sample.
                                                                                                                                                                                                                                 RESULT 616
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cytostatic; antidiabetic; anorectic; metabolic; nootropic; antilipaemic; neuroprotective; antiparkinsonian; anticonvulsant; cerebroprotective;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           of human chromosomes 14 and 22. The chimeric mouse carries the complete human antibody heavy chain gene from chromosome 14 and the light chain lambda gene from chromosome 22. The present sequence is a PCR primer, which was used in an example from the present invention
                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Non-human animals maintaining a modified alien chromosome or its
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·,
                                     Score 14.8; DB 1; Length 22;
Pred. No. 7.4e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%; Score 14.8; DB 1; Length 22; 88.9%; Pred. No. 7.4e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                             PCR primer; chimeric mouse; chromosome 14; chromosome 2; antibody heavy chain gene; light chain lambda gene; ss.
           Sequence 22 BP; 3 A; 7 C; 2 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 22 BP; 5 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NOVX reverse PCR primer SEQ ID No 246.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 9; Page 18; 43pp; Japanese.
                                                                                            1743
                                                                                                                      22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           356 CTGATGGGGAGAGTGACC 373
                                                                                                                                                                                         BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                               18-FEB-2000; 2000JP-00042074.
                                    ch 0.8%;
1 Similarity 88.9%;
16; Conservative
                                                                                           1726 GTTCACCTGCCCACTTGT
                                                                                                                    5 Gricacriscoccacriri
                                                                                                                                                                                     AAI71720 standard; DNA; 22
                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABT05572 standard; DNA; 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (KIRI ) KIRIN BREWERY
                                                                                                                                                                                                                                                                    PCR primer Vkappa3-R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-609926/70.
                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                JP2001231403-A.
                                                                                                                                                                                                                                          15-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                          28-AUG-2001,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-OCT-2002
                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                 AAI71720;
                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            fragment
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                                                                Matches
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ABT05572/
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anti-HIV; antiallergic; antinheumatic; antiarthritic; NOVX; diabetes; metabolic disorder; obesity; infectious disease; Alzheimer's disease; immonexia; neurodegenerative disorder; Parkhnson's disorder; obesity; inmente disorder; beathing; inmente disorder; haematopoletic disorder; dyslipidaemia; chronic disease; metabolic syndrome X; wasting disorder; cancer; neurological disorder; epilepsy; stroke; mental disorder; schizophrenic disorders; goiter; diabetes mellitus; ulcerative colitis; AIDS; allergic reaction; multiple sclerosis; rheumatoid arthritis; transgenic animal; gene therapy; PCR; primer; ss.
tranquiliser; neuroleptic; antidiabetic; antiulcer; antiinflammatory;
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Unidentified.

WO200246409-A2.

13-JUN-2002

06-DEC-2001; 2001WO-US046586 06-DEC-2000; 12-DEC-2000;

2000US-0251660P. 2000US-025029P. 2001US-026380P. 2001US-026380P. 2001US-0269942P. 2001US-0269442P. 08-JAN-2001; 24-JAN-2001; 20-FEB-2001;

2001US-0318712P 24-APR-2001; 20-AUG-2001; L2-SEP-2001;

(CURA-) CURAGEN CORP.

Li L, Patturajan M, Shimkets RA, Casman SJ, Malyankar UM; vrr, Vernet CAM, Spytek KA, Shenoy SG, Alsobrook JP; S, Peyman JA, Stone DJ, Ellerman K, Gangolli BA, Boldog FL; SD, Eisen AJ, Liu X, Padigaru M, Spaderna SK, Zerhusen BD; Malyankar UM; Tchernev VT, Vernet ( Edinger S, Peyman JA, Colman SD, Eisen AJ, Guo X,

WPI; 2002-547774/58

Novel isolated polypeptide, designated NOVX, useful for treating opreventing cancer, diabetes, obesity, dyslipidemia, anorexia, and metabolic, neurodegenerative, immune and hematopoietic disorders.

Example 2; Page 372; 421pp; English.

The invention relates to an isolated polypeptide, designated NOVX, comprising a sequence fully defined in the specification. The isolated protein, its encoding polynucleotide or an antibody created from the protein, its encoding polynucleotide or an antibody created from the cyndrome associated with a human disease, preferably a NOVX-associated disorder. Or for treating or preventing a NOVX-associated disorder in a subject, preferably human. The isolated protein, its encoding complections disease, an antibody created from the protein are also useful for treating or preventing metabolic disorders, diabetes, obesity, confectious disease, annorexia, neurodegenerative disorder, Alzheimer's disorders, and various dyslipidaemias, metabolic disturbances associated with obesity, the metabolic syndrome X, wasting disorders associated with chronic diseases, and cancer. The isolated protein, its encoding chronic diseases, and cancer. The isolated protein, its encoding contracting or preventing metabolic syndrome X, wasting disorders associated with chronic diseases, and cancer. The isolated from the protein are useful for treating or preventing metabolic such as cystic fibrosis, diabetes consistent contracts of vesicular transport such as cystic fibrosis, diabetes mellitic chart contracts in an expectation in the protein restrict contracts of vesicular transport such as cystic fibrosis, diabetes melliture contracts in the protein in the protein are contracted melliture, quieter, gastrointestinal disorders including mecod, with abence of melliture contracts associated with a protein are contracted with the contract of the contract of vesicular transport such as cystic fibrosis, diabetes colitis, other conditions associated with abnormal vesicle trafficking including AIDS, allergic reactions, multiple sclerosis and rheumatoid arthritis. A cell comprising the vector of the invention is useful for producing non-human transgenic animals. The polynucleotide of the invention can be used to treat disorders by gene therapy. This polynucleotide sequence represents a reverse PCR primer for the amplification of a sequence relating to the NOVX proteins of the

Sequence 22 BP; 9 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                  Human, NOVX, atherosclerosis, hypertension, obesity, cancer, cytostatic,
hypotensive, antiarteriosclerotic, anorectic, gene therapy, NOV18; PCR;
                        Gaps
                        .,
0
                        2; Indels
Length
Score 14.8; DB 1;
Pred. No. 7.4e+02;
                       0; Mismatches
                                                    1230 ACAGCTACACTTCATCTT 1247
                                                                                                                                                                                                                                                                                                                                                                                                                           27-FEB-2001; 2001US-0271840P.
28-FEB-2001; 2001US-0272404P.
28-FEB-2001; 2001US-0272410P.
28-FEB-2001; 2001US-0272414P.
28-FEB-2001; 2001US-0272414P.
02-MAR-2001; 2001US-0272782P.
02-MAR-2001; 2001US-0273300P.
16-MAR-2001; 2001US-0273300P.
16-MAR-2001; 2001US-0273300P.
16-MAR-2001; 2001US-0273340P.
20-MAR-2001; 2001US-0280348P.
21-APR-2001; 2001US-0280489P.
21-APR-2001; 2001US-0280489P.
21-APR-2001; 2001US-028058P.
21-APR-2001; 2001US-0280348P.
21-APR-2001; 2001US-0280348P.
21-APR-2001; 2001US-0280348P.
21-APR-2001; 2001US-0280348P.
21-APR-2001; 2001US-0280348P.
21-MAY-2001; 2001US-0280348P.
21-MAY-2001; 2001US-0280348P.
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05-JUL-2001; 2001US-0303242P.
13-AUG-2001; 2001US-0311981P.
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2001US-0313280P.
 0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                         26-FEB-2002; 2002WO-US005910
                                                                             18 ACAGCIGCGCTICATCTT
                                                                                                                                                ADH49031 standard; DNA; 22
                                                                                                                                                                                                   25-MAR-2004 (first entry)
             Best Local Similarity 88.9
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                             NOV18 PCR primer,
                                                                                                                                                                                                                                                                                                                                     WO200268652-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-2001;
                                                                                                                                                                                                                                                                                                                                                             06-SEP-2002.
                                                                                                                                                                                                                                                                                  primer; ss.
                                                                                                                                                                          ADH49031;
    Query Match
                                                                                                                       619
                                                                                                                                   ADH4903
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                                                                           The present invention relates to novel human NOVX proteins, where X is any number from 1 to 91 and their coding sequences (see ADH48717-ADH48930). The proteins and coding sequences are useful for preventing creating disorders or syndromes e.g. atherosclerosis, hypertension, obesity or cancer. The present sequence was used in an example from the invention.
                                                                                                                                                                                                                                                                                                                                                                                              NOVX; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD;
                                                                                                                                                                                                                                                                                                                                                                                                      hypertension, congenital heart defect; acttic stemosis; valve disease; atrial septal defect; atrioventricular canal defect; ductus arteriosus; pulmonary stemosis; subacrtic stemosis; ventricular septal defect; VSD; tuberous sclerosis; scleroderma; atherosclerosis; infectious disease; obesity; anorexia; neurodegenerative disorder; Alzheimer's disease; Parkinson's disease; immune disorder; haematopoietic disorder; primer; haemophilia; hypercoagulation; Crohn's disease; cancer.
                                                                                                                                                                                                            Gaps
                    New NOVX polypeptides or polynucleotides, useful for preventing or treating disorders or syndromes e.g., atherosclerosis, hypertension,
                                                                                                                                                                                                            ;
                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                   Score 14.8; DB 1; Length
Pred. No. 7.4e+02;
                                                                                                                                                             Sequence 22 BP; 12 A; 4 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                          0; Mismatches
                                                              Example 2; Page 649; 923pp; English.
                                                                                                                                                                                                                             1524 GATTCAGCTACAAAAGGA 1541
                                                                                                                                                                                                                                                  3 GAAACAGCTACAAAAGGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-APR-2001; 2010S-0281358F.
05-APR-2001; 2001US-0281863P.
06-APR-2001; 2001US-0281806P.
10-APR-2001; 2001US-0282930P.
10-APR-2001; 2001US-0282934P.
12-APR-2001; 2001US-0283512P.
13-APR-2001; 2001US-0283512P.
13-APR-2001; 2001US-0283512P.
13-APR-2001; 2001US-028550P.
20-APR-2001; 2001US-0285381P.
                                                                                                                                                                                                                                                                                                         ABX72335 standard; DNA; 22 BP
                                                                                                                                                                                                                                                                                                                                                                       Human NOVX DNA PCR primer #40.
                                                                                                                                                                                 0.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001US-0281086P.
2001US-0281136P.
2001US-0281863P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001US-0286292P.
2001US-0287213P.
2001US-0288257P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-APR-2001; 2001US-0285748P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-APR-2002; 2002WO-US010780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001US-0294164P
                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                            Local Similarity 88.9
WPI; 2002-698672/75
                                           obesity or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200281498-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-APR-2001; 2
24-APR-2001; 2
25-APR-2001; 2
                                                                                                                                                                                                                                                                                                                                                   03-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-0CT-2002.
                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                   RESULT 620
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The invention relates to human polypeptides, termed NOVX, and the polynucleotides encoding them. The polypeptides and polynucleotides are useful for diagnoshing disease, and screening for potential therapeutic agents. The sequences are useful for treating for potential therapeutic cardiomyopathy, diabetes, hypertension, congenital heart defects, aortic tenosis, arital septal defect (ASD), attioventricular canal defect, aductus arteriosus, pulmonary stenosis, subaortic stenosis, ventricular septal defect (VSD), valve diseases, tuberous sclerosis, solerodarm, atherosaleorosis, obesity, infectious disease, anorexia, neurodegenerative disorders, Alzheimer's disease, Parkinson's disease, immune disorders, haematopoietic disorders, haemophilia, hypercoagulation, Crohn's disease, and cancer. This sequence represents a PCR primer used to amplify a human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Burgess CE, Gerlach V;
er RJ, Casman SJ, Ji W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated NOVX polypeptide useful for treating atherosclerosis, metabolic disorders, diabetes, obesity, infectious disease, anorexia, neurodegenerative disorders, Alzheimer's disease and cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, NOV; gene therapy; endocrine related disease; diabetes; metabolism-related disease; obesity; central nervous system disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zerhusen BD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Peyman JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
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88.9%; Pred. No. 7.4e+02;
tve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Guo X, Kekuda R, Miller CE, Malyankar UM, Spytek KA, Patturajan M, Liu X, Gusev VY, Li L, Vernet CAM, Zer Gorman L, Shenoy SG, Pena CEA, Smithson G, Burgess CF Padigaru M, Shimkets RA, Gangolli EA, Taupier RJ, Car Anderson DW, Leite MW, Rastelli L, Edinger SR, Stone Macdougall JR, Rothenberg ME, Mazur A, Millet I, Peyn Ellerman K;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NOVX polynucleotide of the invention
18-JUN-2001; 2001US-0298952P.
19-JUN-2001; 2001US-0299237P.
12-SEP-2001; 2001US-0299276P.
25-SEP-2001; 2001US-0324800P.
25-SEP-2001; 2001US-0324802P.
17-OCT-2001; 2001US-0325684P.
17-OCT-2001; 2001US-033131P.
14-NOV-2001; 2001US-0332131P.
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                                                                                                                                                                                                                                                                                                  14-NOV-2001; 2001US-0332779P. 21-NOV-2001; 2001US-0332115P.
                                                                                                                                                                                                                                                                                                                                                               04-DEC-2001; 2001US-0337621P.
03-JAN-2002; 2002US-0345783P.
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                                                                                                                                                                                                                                                                                                                                                                                                                         2002US-0350251P
                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-APR-2002; 2002US-00114270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-046858/04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
ses 16; Conserv
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Alzheimer's disease; Parkinson's disease; epilepsy; multiple sclerosis; schizophrenia; depression; autoimmune disorder; inflammatory disorder; psoriasis; allergy; lupus erythematoisus asthma; cancer; hiflammatory bowel disease; rheumatoid arthritis; osteoarthritis; colon cancer; lung cancer; liver cancer; breast cancer; ovarian cancer; prostate cancer; brain cancer; melanoma; liver disease; inver cirrhosis; lung disease; emphysema; obstructive pulmonary disease; haemophilia; stroke; infection; PCR; primer; ss.

Homo sapiens

WO2003023002-A2.

20-MAR-2003

2002WO-US028539 09-SEP-2002; 07-SEP-2001;

2001US-0318130P. 2001US-0318430P. 2001US-0322636P. 2001US-0322781P. 2001US-0322816P. 19-SEP-2001; 2001US-0323519P. 20-SEP-2001; 2001US-0323631P. 20-SEP-2001; 2001US-0323636P. 25-SEP-2001; 2001US-0324969P. 17-SEP-2001; 17-SEP-2001; 17-SEP-2001; 10-SEP-2001; 17-SEP-2001;

25-SEP-2001; 2001US-0325091P. 26-SEP-2001; 2001US-0324990P. 2002US-0373212P. 06-SEP-2002; 2002US-00236177 17-APR-2002;

(CURA-) CURAGEN CORP.

Zhong M;
Guo X; . Gorman L, Li L, Anderson DW, Zhong M; Ellerman K, Berghs C, Rothenberg ME, Guo X Catterton E, Kekuda R, Ji W, Miller CE; Shenoy SG, Liu X, Padigaru M, Alsobrook JP; Burgess CE; Spytek KA, Patturajan M, Gerlach Wi, Vernet CAM, E Shimkets RA, Leach MD, Car Rieger DK, Taupier RJ, Sh. Lepley DM, Edinger SR, Bu

WPI; 2003-313242/30.

New cytoplasmic, nuclear membrane bound or secreted polypeptides (NOVX) and polynucleotides, useful in gene therapy, e.g. for treating or preventing obesity, multiple sclerosis, allergy, cancers, hemophilia, stroke or infections.

Example 92; Page 465; 586pp; English.

The invention describes a new isolated polypeptide (NOVX). The NOVX polypeptide, nucleic acid and antibody are useful as therapeutics, polypeptide, nucleic acid and antibody are useful as therapeutics, particularly in the manufacture of a medicament for treating a syndrome associated with a human disease, which includes a pathology associated with NOVX polypeptide. The DNA encoding the protein is useful in gene therapy for treating the disease or condition. In particular, the NOVX polypeptide or polymentoleotide is useful for treating endocrine/ metabolism-related diseases (e.g. obssity or diabetes), central nervous system disorders (e.g. Alzheimer's disease, Parkinson's disease, cepilepsy, multiple sclerosis, schizophrenia or depression), autoimmune and inflammatory disorders (e.g. psoriasis, allergy, lupus erythematosus, asthma, inflammatory bowel disease, theumatoid arthritis or osteoarthritis), cancers (e.g. colon, lung, liver, breast, ovarian, concers, or melanoma), liver diseases (e.g. liver cirrhosis), lung diseases (emphysema or obstructive pullmonary disease), haemophilia, stroke, or infections (e.g. viral, bacterial or parasitic). These are also useful in developing powerful assay system for functional analysis of various human disorders, as well as in diagnostic applications, and for monitoring the effects of drugs during clinical trials. This sequence represents a primer used to isolate DNA encoding novel human NOV proteins

Sequence 22 BP; 10 A; 7 C; 3 G; 2 T; 0 U; 0 Other;

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un vitro diagnosis; inappropriate fibrosis; scarring; l6sRNA region;

W ND2 gene; NADH-quinone oxidoreductase; complex I; cytochrome b;
complex III region; COI gene; Cytochrome c oxidase; complex IV region;
w mitochondrial genome; antiinflammatory; vulnerary; dermatological;
w mitochondrial genome; antiinflammatory; vulnerary; dermatological;
w mitochondrial genome; solerosis; crest syndrome; tuberous sclerosis;
scleroderma; systemic sclerosis; crest syndrome; tuberous sclerosis;
w skin patch; familial cutaneous collagenoma; win metabolic disorders;
w skin patch; familial cutaneous collagenoma; win metabolic disorders;
w mixed connective tissue disease; drug-induced skin fibrosis;
w oral submucous fibrosis; drug induced fibrosis; liver fibrosis;
w cirrhosis; renal fibrosis; drug induced fibrosis;
w vascular system fibrosis; glomerulomephritis; cystic fibrosis;
w pymaecological fibrosis; glomerulomephritis; cystic fibrosis;
w neurodegenerative disorder; human; PCR; primer; ss.
                          0;
                            Gaps
                                                                                                                                                                                                                          Human fibrosis/scarring predisposition-related PCR primer SeqID36.
                            ô
  Length 22;
                            2; Indels
Score 14.8; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 2;
                                                       1417
                                                                               N
                                                                                                                                                 ADJ45837 standard; DNA; 22 BP.
 0.8%;
                                                        1400 TGTTGCAGTTTGAGGGTC
                                                                                 19 rerereagrireaggic
                                                                                                                                                                                                      06-MAY-2004 (first entry)
               Best Local Similarity 88.5
Matches 16; Conservative
                                                                                                                                                                             ADJ45837;
     Query Match
                                                                                                                                      ADJ45837,
                                                                                                                          RESULT
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23-APR-2003; 2003WO-GB001717. 30-APR-2002; 2002GB-00009812 (RENO-) RENOVO LTD.

WO2003093506-A2 Homo sapiens.

L3-NOV-2003.

Bayat A; Ferguson MWJ, Ollier WER,

WPI; 2004-022664/02.

In vitro diagnosing a condition due to inappropriate fibrosis or scarring, e.g. Dupuytren's disease by detecting polymorphism or mutation in the 16sRNA region, ND2 gene, cytochrome b region or COI gene of the mitochondrial genome

Example 1; SEQ ID NO 36; 81pp; English.

detection of a predisposition to a condition characterised by inappropriate fibrosis or scarring comprising examining the 168RNA region, ND2 gene of NABH-quinone oxidoreductase (complex I), cytochrome b (complex III) region or COI gene of Cytochrome c oxidoreductase (complex IV) region of the mitochondrial genome to detect the presence of a genetic polymorphism or mutation linked to the development of the condition. The invention may be useful for the development of compositions with an antiinflammatory, vulnerary, dermatological or nephrotic activity. In addition, the sequences disclosed may prove useful for gene therapy. The method, kit or delivery may be useful for diagnosing or detecting or treating a predisposition to a condition characterised by inappropriate fibrosis or scarring. A modulator of mitochondrial genome gene products This invention relates to a novel method of in vitro diagnosis or

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is useful in the manufacture of medicament for treating a condition characterised by fibrosis or scarring. The condition is Dupuytren's disease, Keloid or hypertropic scar, scleroderma, systemic sclerosis, crest syndrome, tuberous sclerosis with skin patches, familial cutaneous collagenoma, metabolic disorders of the skin, eosinophilic fascitis, collagenoma, dermatcoms, dermatcomyositis, mixed connective tissue disorder synthematosis, candided skin fibrosis, cand submucous fibrosis, fibrosis cinduced following dietary and environmental exposures, pulmonary/cardiac fibrosis, and environmental exposures, graduced following mycardial infarction and central nervous system fibrosis, fibrosis following mycardial infarction and central nervous system fibrosis following a stroke or neurodegenerative disorders. The present sequence is that of a PCR primer which was used for amplification of the human mitochondrial genome in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABC transporter; ATP-binding cassette; leucocyte; PCR; primer; ss; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel primer set comprising oligonucleotides in which I or 2 base sequences are substituted to any one of 1-96 primer set. The primer set of the invention may be useful for detecting the expression of an ABC (ATP-binding cassette) transporter gene within human leucocytes by polymerase chain reaction. The current sequence is that of a PCR primer of the invention which was used to amplify human ABC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel primer set useful for detecting expression of ABC transporter gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  used to amplify human ABC transporter ABCB9 cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.8; DB 1; Length 22;
Pred. No. 7.4e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                               Sequence 22 BP; 6 A; 3 C; 8 G; 5 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1203 CCTCTTTCCGGGCTCCAC 1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTCTTTACGGACTCCAC 1
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                                                                                                                                                                                                                                                                                                                                                                                                         0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-JUN-2002; 2002JP-00165863.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   by polymerase chain reaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-JUN-2002; 2002JP-00165863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADL71202 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                              16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
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ADL71202/c
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Score 14.8; DB 1; Length 22; Pred. No. 7.4e+02;

0.8%;

Query Match Best Local Similarity

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                                                                                                                                                                                                                                    ss; PCR; vernalisation independence polypeptide; VIP4; flowering regulation; flowering induction; cold response; vernalisation; transgenic plant; thale cress; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated nucleic acids encoding vernalization independence genes, useful for regulating flowering, e.g. induction of flowering in response to cold or vernalization.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an isolated vernalisation independence polypeptide (VIP) operably linked to a promoter. The nucleic acids and the VIP polypeptides are useful for regulating flowering, particularly the induction of flowering in response to cold, or vernalisation. It can also be used to remove requirements for vernalisation in transgenic plants and to isolate homologous genes in other plants for similar use.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents a thale cress vernalisation independence polypeptide, VIP4, probe PCR primer.
  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%; Score 14.8; DB 1; Length 22;
88.9%; Pred. No. 7.48+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human methyl-CpG-binding protein 2, MBCP2, PCR primer #12.
    Indels
    7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 22 BP; 9 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
  Mismatches
                                                                                                                                                                                                            Thale cress VIP4 probe PCR primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 33; 67pp; English.
                           1504 TCCATATTTGCACTAAAG 1521
 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   666 AGGCAAAGCAAGCTCAC 683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18
                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                              01-MAY-2003; 2003US-00427224.
                                                                                                                                                                                                                                                                                                                                                                                                           01-MAY-2002; 2002US-0376765P
                                                TACATATITGCACTGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGCAAACACAAGCTCAC
                                                                                                                           22
                                                                                                                                                                                03-JUN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22
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 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                          ADM56137 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Van Nocker SR, Zhang H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADK13910 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                     (VNOC/) VAN NOCKER S R.
                                                                                                                                                                                                                                                                                             Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-180056/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ZHAN/) ZHANG H.
                                                                                                                                                                                                                                                                                                                        US2004033607-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-JUN-2004
                                                       18
                                                                                                                                                      ADM56137;
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                                                                                                 624
Matches
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                                                                                              RESULT 6
ADM56137
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10017621-3sl.rng

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Locus-specific, separate amplification of exon 2, exon 3, and/or exon 4 of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles using defined primer sets, useful for subtyping or typing of HLA Class I alleles.
                                                                                                                                                                                                                                                    The invention relates to a method of screening a human for Rett syndrome comprising detecting a mutation in a nucleic acid sequence encoding methyl-CpG-binding protein 2 (MECP2). The method is useful for screening a human for Rett syndrome. The method is useful for screening neurodevelopmental diseases such as Rett syndrome, autism, non-syndromic mental retardation, idiopathic neonatal encephalopathy, idiopathic infantile spasms, idiopathic cerebral palsy, Angelman syndrome and schizophrenia. The present sequence represents a human methyl-CpG-binding protein 2, MECP2, PCR primer.
                                                                                                                                                         Screening human for Rett syndrome comprises detecting mutation in nucleic acid sequence encoding methyl-CpG-binding protein 2\ (\text{MECP2}).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to a method for the locus-specific, separate amplification of exon 2, exon 3, and/or exon 4 of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles. The method is useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 22;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Reverse primer #24 used for amplification of HLA-A exon
                                                                           Francke U;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 22 BP; 2 A; 0 C; 13 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.8; DB 1;
88.9%; Pred. No. 7.4e+02;
ative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HLA-A; HLA-B; HLA-C; typing; primer; human;
                                                                             Amir R,
                                                                                                                                                                                                                      Claim 3; SEQ ID NO 84; 125pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          껖
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rossau
                                     (BAYU ) BAYLOR COLLEGE MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        228 GAGTGGTGGTGGCGG 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGTGGTGGTGATGGTGG 19
                                                                             Van Den Veyver IB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99EP-00870068.
99US-0138614P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-APR-2000; 2000WO-EP002998
99US-0152778P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (INNO-) INNOGENETICS NV
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                                                                                                                     WPI; 2004-256068/24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAC80112 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-MAY-2001
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  07-SEP-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            De Canck I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAC80112;
                                                                               Zoghbi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAC80112/
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        neurodevelopmental diseases such as Rett syndrome, autism, non-syndromic mental retardation, idiopathic neonatal encephalopathy, idiopathic infantile spasms, idiopathic cerebral palsy, Angelman syndrome and schizophrenia. The present sequence represents a human methyl-CpG-binding protein 2, MECP2, PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Screening human for Rett syndrome comprises detecting mutation in nucleic acid sequence encoding methyl-CpG-binding protein 2\ (\text{MECP2}).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a method of screening a human for Rett syndrome comprising detecting a mutation in a nucleic acid sequence encoding methyl-CpG-binding protein 2 (MECP2). The method is useful for screening a human for Rett syndrome. The method is useful for screening
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          neurodevelopmental disease; autism; non-syndromic mental retardation; idiopathic infantile spasm; idiopathic infantile spasm; idiopathic cerebral palsy; Angelman syndrome; schizophrenia; ss; primer;
                     human; Rett syndrome; methyl-CpG-binding protein 2; MECP2; neurodevelopmental disease; autism; non-syndromic mental retardation; idiopathic neonatal encephalopathy; idiopathic infantile spasm; idiopathic cerebral palsy; Angelman syndrome; schizophrenia; ss; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human; Rett syndrome; methyl-CpG-binding protein 2; MECP2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human methyl-CpG-binding protein 2, MECP2, PCR primer #25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 22 BP; 2 A; 0 C; 13 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                          Francke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 14.8; DB 1;
Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                          Zoghbi HY, Van Den Veyver IB, Amir R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 3; SEQ ID NO 12; 125pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       245
                                                                                                                                                                                                                                                                                                                                                  (BAYU ) BAYLOR COLLEGE MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%;
88.9%;
                                                                                                                                                                                                                                                                    07-SEP-2000; 2000US-00657013.
                                                                                                                                                                                                                                                                                                            99US-0152778P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       228 GAGTGGTGGTGGCGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-256068/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
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                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                            07-SEP-1999;
                                                                                                                                                                                       US6709817-B1
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ADK13982

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for subtyping or typing of HLA class 1 alleles. The present sequence is an amplification primer used in the method
                                                                                                                                                                                                                                                                                                                                                                                   Human, cystic fibrosis transmembrane conductance regulator; CFTR; PCR; recombinant; expression; bacterium; homology; Pribnow box; TATA box; transcription; translation; truncation; site-directed mutagenesis; prokaryote; open reading frame; primer; amplification; ss.
                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Modified DNA sequence - derived from gene coding for cystic fibrosis trans:membrane conductance regulator protein.
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                                                                             0.8%; Score 14.6; DB 1; Length 20; 88.2%; Pred. No. 7.4e+02; ive 1; Mismatches 1; Indels
                                               Sequence 20 BP; 1 A; 9 C; 6 G; 3 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 7 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                       Human CFTR gene upstream 5' mutagenic primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure, Fig 7; 36pp; English.
                                                                                                                                           249 TGACCCTGGAGAGGCCC 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 89US-00396894.
89US-00399945.
89US-00401609.
90GB-00020632.
                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                           20 TGHCCCGGGAGAGGCCCC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96US-00604488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93US-00030081
                                                          Dury Match BB.2%, Best Local Similarity 88.2%, Conservative
                                                                                                                                                                                                                                                          AAX04445 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                        (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rommens JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1992-150482/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                        11-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-AUG-1989;
21-SEP-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-APR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US5863770-A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                        AAX04445;
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The sequences given in AAQ36670-78 are primers which were used in the isolation and cloning of the polyphenol oxidase (PPO) enzyme genes from various plants. The PPO genes were isolated, and recombinant plasmids for transformation of plant cells were produced by PCR using these primers. PPO is thought to be the predominant catalyst in browning of fruit caused by injury or damage. PPO is localised in the plastids of fault cells whereas the phenolic substrates of the enzyme are stored in the plant cells whereas the phenolic substrates of the enzyme stored in the plant cells whereas the plant cells are damaged and the enzyme and the substrate are mixed. The PPO gene sequences could be used to construct synthetic genes which may be used to transform plants to decrease expression of the enzyme gene. In some instances, eg. coffee, tea, black oilves etc., it is desirable to increase the level of PPO to produce colives etc., it is desirable to increase the level of PPO to produce colives etc., it is desirable to increase the level of PPO to produce colives etc., it is desirable to increase the level of PPO to produce colives for an additional 103 amino acids upstream of the N-terminus of the mature protein. This region has the properties of a chloroplast transit peptide and is most likely responsible for targetting of the protein to be imported into the chloroplast and processed to colorwal entremation of plants with this gene may therefore colorwall in accumulation of active grapevine PPO in other species and result in accumulation of active grapevine PPO in other companies.
                                                                                                                                                                                                                                                                                                                                          Polyphenol oxidase; PPO; catalyst; browning; fruit; plastid; vacuole; transform; coffee; tea; black olives; grapevine; chloroplast; apple; transit peptide; recombinant plasmid; PCR; primer; amplify; broad bean; potaco; polymerase chain reaction; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA encoding polyphenol oxidase polypeptide or fragment - useful for modifying the oxidase activity in fruit and vegetables to decrease or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 5 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CSIR ) COMMONWEALTH SCI & IND RES ORG.
1530 GCTACAAAGGAGGCCAGCCT 1550
                                        1 GCTACCAAAGCAGTACAGCCT 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 20; Page 24; 44pp; English.
                                                                                                                                                   BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            91AU-00007248
                                                                                                                                                 AAQ36678 standard; cDNA; 21
                                                                                                                                                                                                                                     (revised)
(first entry)
                                                                                                                                                                                                                                                                                                    Potato PPO primer #4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Robinson SP, Dry IB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1993-058792/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            enhance browning.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-JUL-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9302195-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-FEB-1993.
                                                                                                                                                                                                                                     25-MAR-2003
                                                                                                                                                                                                                                                            09-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                           AAQ36678;
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Gaps ..

0.8%; Score 14.6; DB 1; Length 21; larity 81.0%; Pred. No. 7.7e+02; Conservative 0; Mismatches 4; Indels

Ouery Match
Best Local Similarity

0;

Gaps

. 0

0.8%; Score 14.6; DB 1; Length 21; 31.0%; Pred. No. 7.7e+02; ive 0; Mismatches 4; Indels

81.0%;

Query Match Best Local Similarity Matches 17; Conserv

Conservative

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27-NOV-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 81.0
Matches 17; Conservative
                                                                                                                                                                                                                                  WPI; 1995-215278/28.
                                                                                                 WO9515400-A1
                                                                                                                                              05-DEC-1994;
                                                                                                                                                                   03-DEC-1993;
                                                                                                                       . 3661-NUL-80
                                                                                                                                                                                                              Levitt RC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT27419;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 632
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequences given in AAQ45198-200 and AAQ61687-777 are primers which were used in the isolation and amplification of the genomic sequence of the hepatitis E virus (HEV) strain SAR-55. These primers were based on sequences derived from the SAR-55 strain and a strain from Burma (BUR-121). The amplified sequence contains three open reading frames (CRFs). The proteins encoded by this sequence can be used to stimulate the production of protective antibodies upon injection into a mammal that would serve to protect the mammal upon challenge with wild type HEV. The proteins can be used for detection and diagnosis of HEV infection. This cDNA was isolated from primates innoculated with stool suspensions obtained from hepatitis E patients. (Updated on 25-MAR-2003 to correct PN
                                                                                                                                                                                                                                                                                                                                                                                                  .....eu mepatitis E strain SAR-55 virus - used to develop prods. for use in detection, diagnosis, vaccines and therapy of hepatitis E virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                              Hepatitis E virus; HEV; strain SAR-55; open reading frame; ORF; PCR; antibody; detection; diagnosis; primates; stool suspension; amplify; polymerase chain reaction; primer; burma; strain BUR-121; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 14.6; DB 1; Length 21;
Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seguence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                               Tsarev SA, Emerson SU, Purcell RH;
998 TGCTCATCAACGAGGGGAG 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 38; 114pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              814 CACACGGAGAGTCCCTCACC 834
           21 CACACTGAGAGTGCGTCATC 1
                                                                                                                                                        HEV strain BUR-121 primer R193.
                                                                            AAQ61708 standard; cDNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                            93WO-US008849.
                                                                                                                                                                                                                                                                                                                  92US-00947263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 0.8%;
Best Local Similarity 81.0%;
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ95568 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                         (USSH ) US SEC DEPT HEALTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                   (first entry)
                                                                                                                         (revised)
                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1994-118462/14.
                                                                                                                                                                                                                                                                                                                  L8-SEP-1992;
                                                                                                                                                                                                                                                 WO9406913-A2
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                                                                                                                       25-MAR-2003
21-OCT-1994
                                                                                                                                                                                                                                                                       31-MAR-1994.
                                                                                                                                                                                                                           Synthetic.
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                                                                                                  AAQ61708;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 631
                                                       RESULT 630
                                                                 AAQ61708/c
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microsatellite marker sequences (MMS) at approx. 10-50 cM intervals throughout the human genome which can be detectably labelled. The MMS are polymorphic, simple sequence repeats and can be used in automated genotyphing esp. fluorescence-based. The primers correspond to the unique DNA sequence surrounding each marker, and PCR is used to detect each polymorphism. When the MMS show considerable polymorphism (ie. a difference in the number of repeats) between individuals, the markers can be particularly informative. The MMS can be ideal for linkage studies. Kits comprise at least 4 groups, of at least 3 sets, each comprising labelled primers for PCR amplification of the DNA. Group 4 primer pairs are shown in AAQ95465-480 and AAQ95559-590. The chromosomal markers, published size range of the allele and degree of heterozygosity in the specification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hepatitis E virus; HEV; SAR-55 strain; enteric transmission; structural region; antigen; detection; antibody; vaccine; immunisation; infection; Burma-121 strain; primer; polymerase chain reaction; PCR; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kit for automated genotyping contg. pairs of PCR primers - designed to amplify polymorphic nucleotide repeat sequences, arranged in sets each with a characteristic fluorescence label, useful e.g. in detection of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The method aims to provide a collection of highly reproducible
                                                                   primer; polymerase chain reaction; PCR; linkage study; locus; microsatellite marker sequence; automated genotyping; allele; polymorphism; detection; Homo sapiens; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%; Score 14.6; DB 1; Length 21;
11.0%; Pred. No. 7.7e+02;
ve 0; Mismatches 4; Indels
Primer B2 (Group 4, set A) for a human chromosomal marker.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HEV strain Burma-121 derived reverse primer 193 (ORF-1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 21 BP; 9 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         disease related genetic rearrangement.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Fig 7D-3; 104pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 AAGCAGCGTAAAGGATGGACA 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AAGCATCTTAATGGATGGAAA 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94WO-US013945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93US-00160837
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WPI; 1998-568733/48.
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                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         32-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9824797-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                           13-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                      AAV38621;
                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hoke GD,
                                                                                                                                                                                                                                                                                                                                                                                     AAV38621/c
ID AAV38
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                                                                                                                                                                                                                      The present sequence is a hepatitis E virus (HEV) strain Burma-121 derived primer, used in the isolation of the HBV strain SAR-55 cDNA. The HBV strain SAR-55 cDNA. The HBV strain SAR-55 cDNA. The HBV strain SAR-55 was implicated in an enterically transmitted non-A, non-B hepatitis in Pakistan. The protein encoded by the structural region of the virus (i.e. ORF-2), which is capable of forming HEV like particles, is useful for the detection of HEV antibodies (pref. 199 or 199) in blood, plasma, sera, cerebrospinal fluid, tissue, urine or pleural fluid. The protein, and anti-HBV antibodies generated using the protein, can also be used in vaccines for immunising an animal against HEV infection. The protein is identified as a band of greater than 50 kb following SDS-PAGE of cell lysates of insect cells infected with a HEV ORF-2 content backlovitus, i.e. the claimed recombinant expression vectors pPIC9-1779,
                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hepatitis E virus; HEV; SAR-55; diagnostic agent; vaccine; antibody; passive immunisation; open reading frame; ORF; PCR primer; ss.
                                                                                                                                                      Isolated and purified hepatitis E virus strain SAR-55 DNA - encodes antigenic protein useful in diagnosis, prophylaxis and treatment of hepatitis E virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.6; DB 1; Length 21;
31.0%; Pred. No. 7.7e+02;
ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HEV ORF proteins encoding DNA amplifying primer R 193 B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Emerson SU, Purcell RH, Tsarev SA, Robinson RA;
                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                      (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (USSH ) US DEPT HEALTH & HUMAN SERVICES
                                                                                                              Purcell RH;
                                                                                                                                                                                                    Example 1; Page 40; 121pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    814 CACACGGAGAAGTCCCTCACC 834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21 cacacrdadaagracarc 1
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                                            95WO-US013102
                                                                 94US-00316765
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                                                                                                                                                                                                                                                                                                                                                                                                                   81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAV71629 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 81.0
ses 17; Conservative
                                                                                                              Emerson
                                                                                                                                   WPI; 1996-209320/21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
Hepatitis E virus.
                                                                                                                                                                                                                                                                                                                                                            -1781
                                            03-OCT-1995;
                                                                 03-OCT-1994;
WO9610580-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-APR-1997;
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                     11-APR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-FEB-1999
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                                                                                                                                                                                                                                                                                                                                                             -1780 and
                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV71629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          633
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                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT
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                                                                                                                                                                                                                 Sequences AAV71605 to AAV71698 represent primers used for PCR amplification of the hepatitis E virus (HEV) DNA SAR-55 encoding the open reading frame (ORF) proteins ORF-1, ORF-2 and ORF-3. A host organism transformed or transfected with a recombinant expression vector containing the SAR-55 nucleic acid can be used to produce the HEV proteins, especially ORF-2 protein. The recombinant HEV proteins can be used as diagnostic agents and as vaccines for use against HEV infection. The detection of antibodies specific for HEV can be used for the diagnostic of infection and diseases caused by HEV, and for monitoring the progression of such disease. Such methods are also useful for monitoring the efficacy of therapeutic agents during the course of treatment of HEV infection and disease in a mammal. The antibodies can be used for
New hepatitis E virus DNA from Pakistani strain SAR-55 - used for, e.g. developing products for diagnosis of, and vaccination against hepatitis E virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The sequence is that of an antisense oligonucleotide which is substantially complementary to at least a portion of the pre- or mature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense oligonucleotides to ICAM-1, E-selectin or VCAM-1 - useful for treating diseases having an inflammatory component, e.g. psoriasis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ICAM-1; intracellular adhesion molecule-; E-selectin; VCAM-1; vascular cell adhesion molecule-1; antisense; inflammatory; disease; treatment; septic shock; psoriasis; wounds; burns; acne; arthritis; organ rejection; inhibition; expression; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 14.6; DB 1; Length 21; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human ICAM-1, E-selectin, VCAM-1 antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     detection or for passive immunisation of mammals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                    Example 1; Page 42; 204pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   814 CACACGGAGAAGTCCCTCACC 834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACACTGAGAAGTGCGTCATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 8; Page 40; 48pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             621/c
AAV38621 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DYAD-) DYAD PHARM CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           treating diseases having
wounds and septic shock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bradley MO,
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This invention describes a novel method for identifying an inhibitor potentially useful for treatment of cancer, where the inhibitor is active on a gene vital for cell growth or viability, and where the gene is subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is used for preventing the development of cancer in a patient having a precancerous condition, by administering to the patient a first allele specific inhibitor (ASI) targeted to an allele of a first sesential gene present in cells of the precancerous condition, where the normal sommatic cells of the patient are heterozygous for the first gene, the inhibitor is active on at least one but less than all allelic forms of the gene present in a population and targets only one allelic form present in the normal sommatic cells, and the first gene. The products and methods can be used in the diagnosis, prevention and treatment of LOH disorders, e.g. cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic lesions, benign tumours, endometriosis, polycystic kidney disease, and graft versus host disease. The method can also be used to remove
                                                                                                                                                                                                                                         ö
                                                                                   inflammatory component, e.g. acne, psoriasis, arthritis, organ rejection, wounds, burns, septic shock or inflammatory complications of septic shock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Polymorphism; human, inhibitor; cancer; treatment; cell growth; LOH; cell viability; loss of heterozygosity; precancerous condition; ASI; allele specific inhibitor; somatic cell; diagnosis; prevention; atherosclerotic plaque; premalighant metaplastic lesion; endometriosis; dysplastic lesion; benign tumour; polycystic kidney disease; transplant; graft versus host disease; malignant cell removal; bone marrow; ss.
RNA transcript of human intracellular adhesion molecule (ICAM), Eselectin or vascular cell adhesion molecule (VCAM). It can be used to inhibit expression of these proteins. Inhibition of these proteins forms the basis for treatment of conditions and diseases that have an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Identifying target genes for allele-specific drugs - used for diagnosis,
                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   prevention and treatment of, e.g. cancers, atherosclerotic plaque, dysplastic lesions, endometriosis or graft versus host disease.
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                                                                                                                                                                                          0.8%; Score 14.6; DB 1; Length 21; 11.0%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                       Indels
                                                                                                                                                    Seguence 21 BP; 3 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                       0; Mismatches
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                                                                                                                                                                                                                                                                                                                 21 TGAGAGGGAAGTGGTGGGGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human polymorphic region 968.
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                                                                                                                                                                                                              Local Similarity 81.0%;
nes 17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1998-521232/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-MAR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAZ26779;
                                                                                                                                                                                                 Query Match
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Matches
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malignant cells from bone marrow transplants. AAZ25812-Z26825 represent
human polymorphic sites described in the method of the invention
                                                                                                                                                                                                                                                                                                                                                               LKB1 gene; human, serine protease; Peutz-Jeghers syndrome; PJ syndrome; variation detection; therapy; diagnosis; primer; probe; ss.
                                                                                                        Gaps
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31.0%; Pred. No. 7.7e+02;
ive 0; Mismatches 4; Indels
                                                                          Length 21;
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                                              Sequence 21 BP; 9 A; 5 C; 7 G; 0 T; 0 U; 0 Other;
                                                                         0.8%; Score 14.6; DB 1;
81.0%; Pred. No. 7.7e+02;
tive 0; Mismatches 4;
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                                                                                                                                      1613 AAGCCACAGACCGAGGCCCCA 1633
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                                                                                                                                                                                                                                                                                                                                    Human LKB1 gene primer/probe
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                                                                                          Best Local Similarity 81.0
Matches 17; Conservative
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Matches 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
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ID AAX090
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This sequence represents a probe targeted at the ICP6 gene of herpes simplex virus type 2 (HSV-2) SB5 (ATCC VR 2546). It was used as a TagMan probe in quantiative analysis of the HSV-2 genome. The invention provides a novel genetic analysis method termed Fine Array Transcript Mapping (FAT Mapping) for detecting and measuring RNA molecules transcribed from a transcript. FAT mapping involves probing a test grid containing an array of 100s to 1000s of overlapping genomic clones or DNA fragments with probes consisting of labeled cDNAs representing the RNA transcripts from test populations. The system allows quantitative measurements of the expression of rare transcripts, and enables the analysis of 100s of genes within a genomic sequence in a single run. The method can be used to measure the differential expression of transcripts between 2 or more different viral, tissue or cell populations which share a common genomic sequence, or to determine whether a particular open reading frame is expressed under certain conditions. The FATMap technique has been applied
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human biallelic marker downstream amplification primer SEQ ID NO:10136.
                                                                                                                                                                                                                                                                    Novel analytical method designated Fine Array Transcript Mapping, us for detecting and measuring RNA molecules transcribed from a genome, differential expression, and sequence mapping.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human genome, biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%; Score 14.6; DB 1; Length 21;
81.0%; Pred. No. 7.7e+02;
ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 4 A; 10 C; 4 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 17; 53pp; English.
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                                                                        (SMIK ) SMITHKLINE BEECHAM CORP.
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      98US-0090464P.
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98US-0109732P.
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Bust Local Similarity 81.00,
Bust Local 17; Conservative
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                                                                                                                                       Tal-Singer
                                                                                                                                                                                                         WPI; 2000-147217/13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       to the HSV-2 genome
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      24-JUN-1998;
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23-NOV-1998;
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                                                                                                                                          Leary JJ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense oligonuclectides (ASO) for inhibiting a tumour necrosis factoralpha (TNF-alpha) gene in an animal, preferably a human, comprise 12-50 nuclectides, 90% of which are complementary to a region of mRNA containing a GGGA sequence motif. The ASO is used to inhibit expression of a gene in an animal and for treating the animal when afflicted with a disease or disorder characterised by the presence of an mRNA from a gene containing a GGGA motif. The ASO are specifically targeted to a GGA sequence motif found in mRNA from a gene. A study of known ASO has shown that at least half of the most efficacious ASO's contain one or more TCCC motifs. This ASO comprises a TCCC motif followed by a cytosine residen and corresponds to a region of the human ICAM-13' untranslated region
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0
                                                                                                                                    Tumour necrosis factor alpha; TNF-alpha; antisense oligonucleotide; ASO; inhibition; expresssion; treatment; disease; disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Generation of antisense oligonucleotides - by specifically targeting GGGA motif found in mRNA sequences.
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31.0%; Pred. No. 7.7e+02;
ive 0; Mismatches 4; Indels
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                                                                  Tumour necrosis factor alpha antisense oligonucleotide.
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   (first entry)
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Best Local Similarity 81.0
Matches 17; Conservative
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                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                          WO9901139-A1
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14-JUN-1999
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                                                                                                                                                                                                                                     Synthetic
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RESULT 638

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Gaps

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Gaps

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(GEST ) GENSET
                                                                                             diagnosis; ss
                                                                                                 Homo sapiens
                                                                                                     WO9954500-A2
                                                                                                            21-APR-1999;
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                                                                                                                  23-NOV-1998;
                                                                                                        28-OCT-1999,
                                                                          AAZ73450;
                                                 Query Match
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                                                     Matches
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invention, which contain a polymorphic base at position 24 of their invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the pharmaceutical agents acting on a disease as well as other treatment. N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Locus-specific, separate amplification of exon 2, exon 3, and/or exon 4 of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles using defined primer sets, useful for subtyping or typing of HLA Class I alleles.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a method for the locus-specific, separate amplification of exon 2, exon 3, and/or exon 4 of human leukocyte antigen (HiA)-A, HIA-B, or HIA-C alleles. The method is useful for subtyping or typing of HiAs class 1 alleles. The present sequence is an amplification primer used in the method
AAZ65654 to AAZ69578 represent human biallelic markers from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.6; DB 1; Length 21;
81.0%; Pred. No. 7.7e+02;
ative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 14.6; DB 1; Length 21; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Reverse primer #25 used for amplification of HLA-A exon 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 1 A; 9 C; 7 G; 3 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 2 A; 1 C; 9 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HLA-A; HLA-B; HLA-C; typing; primer; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    429 CAACCATCCCCCACGCAGGAT 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rossau R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 4; Page 35; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21 CAACCACCAACACTCAAGAT 1
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88.2%;
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99US-0138614P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAC80113 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 81.0
nes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rombout A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (INNO-) INNOGENETICS NV
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Best Local Similarity
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11-JUN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                          AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their mucleotide sequences. AAZ69579 to AAZ7740 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the difficacious responses to and side effects from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pharmaccutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel biallelic markers used to construct a high density disequilibrium map of the human genome.
                                                                             Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human biallelic marker upstream amplification primer SEQ ID NO:7806.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human genome, biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; gentotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 8 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
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                                                                                                                                                     Claim 9; Page 2391; 2745pp; English.
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98US-0109732P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-SEP-2001 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              D, Blumenfeld M,
                                                                                                       map of the human genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-013267/01.
                            WPI; 2000-013267/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            present invention
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Matches

à QQ RESULT 642

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The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocardial infarction, coronary heart disease, etroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also correlations to diseases. The present sequence is an example of one of the human gene SNPS shown in the specification
                                                                                                                                                                 Human; variant thrombospondin 1; variant thrombospondin 4; SNP; polymorphism; vascular disease; coronary artery disease; forensics; mycoardial infarction; atherosclerosis; stroke; venous thromboembolism; pulmonary embolism; paternity test; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                              'standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.8%; Score 14.6; DB 1; Length 21;
31.0%; Pred. No. 7.7e+02;
lve 0; Mismatches 4; Indels
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                                                                                                                             Human gene single nucleotide polymorphism #1316.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (WHED ) WHITEHEAD INST BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ireland JS,
                                                                                                                                                                                                                                                                                                               Location/Qualifiers replace(11,G)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example; Page 139; 242pp; English.
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      AAF96555 standard; DNA; 21 BP.
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26-JUL-2000; 2000US-0220947P.
16-AUG-2000; 2000US-0225724P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-SEP-2000; 2000WO-US024503.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MILLENNIUM PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   larity 81.0%;
Conservative
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                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Garqill M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-226749/23.
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nes 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                     WO200118250-A2
                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                      06-JUN-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lander ES,
                                                                                                                                                                                                                                                                                                                                       Variation
                                             AAF96555;
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Matches
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AC AAF9
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threonine kinase gene LKB1 (also known as STK11), in which all or part of
the gene or its expression regulating region is deleted. Also described
are: (1) cells which have the potential to differentiate, from the
Knockout mammal, in which expression of the intrinsic LKB1 gene is
suppressed, and (2) producing the animal in which these cells are
inserted into an isolated embryo of the mammal. Which is then implanted
into a false-pregnancy host female and brought to term. The knockout
cammal can be used in the investigation of the onset mechanism of
diseases in which LKB1 defects are implicated, including many tumours and
controlled and treatment methods for these diseases, including the
screening of substances for their use in treatment and prevention. The
knockout mice may have LKB1 suppression which is time or tissue specific.
The present sequence represents a PCR primer used in the amplification of
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      Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Knockout mammal for LKB1 (STK11) gene for the investigation of and development of treatments for cancer and Peutz-Jeghers syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mouse LKB1, which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                        Mouse; LKB1; gene knockout animal; LKB1 gene disruption; cancer; Peutz-Jeghers syndrome; serine/threonine kinase; STK11; tumour;
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Pred. No. 7.7e+02;
); Mismatches 4; Indels
    Indels
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    Mismatches
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                                                                                                                                                                                                                                                                                                             Mouse LKB1 PCR primer SEQ ID NO:7.
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  1;
                                           249 TGACCCTGGAGAGGCCC 265
                                                                                                                                                                                     AAC92275 standard; DNA; 21 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jishage K,
                                                                               21 TGHCCCGGGAGAGGCCC
                                                                                                                                                                                                                                                                       (first entry)
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Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ose A,
                                                                                                                                                                                                                                                                                                                                                                                           PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CHUGAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200072670-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus
                                                                                                                                                                                                                                                                       22-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-DEC-2000,
  15;
                                                                                                                                                                                                                              AAC92275;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nezu J,
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(CHIUS

Mccarthy JJ;

Daley GQ,

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Gaps

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AAF96059

RESULT 643

à qq AAF96555

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The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocardial infarction, coronary heart disease, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also useful in forenaics, paternity testing, genetic analysis and phenotype correlations to diseases. The present sequence is an example of one of
                                                         Human, variant thrombospondin 1; variant thrombospondin 4; SNP;
polymorphism; vascular disease; coronary artery disease; forensics;
myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
pulmonary embolism; paternity test; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mccarthy JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and
                                                                                                                                                                                                                          /standard name= "single nucleotide polymorphism"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Daley GQ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 2 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human gene single nucleotide polymorphism #1079.
                            Human gene single nucleotide polymorphism #820.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the human gene SNPS shown in the specification
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                                                                                                                                                                                                                                                                                                                                                                                                                       (WHED ) WHITEHEAD INST BIOMEDICAL RES. (MILL-) MILLENNIUM PHARM INC.
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                                                                                                                                                                          Location/Qualifiers replace(11,C)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example; Page 105; 242pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                       10-SEP-1999; 99US-0153357P.
26-JUL-2000; 2000US-0220947P.
16-AUG-2000; 2000US-025724P.
                                                                                                                                                                                                                                                                                                                          07-SEP-2000; 2000WO-US024503.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81.0%;
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06-JUN-2001 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gargill M,
                                                                                                                                                                                                            /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-226749/23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        atherosclerosis.
                                                                                                                                                                                                                                                            WO200118250-A2
                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-JUN-2001
                                                                                                                                                                                                                                                                                          15-MAR-2001
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                                                                                                                                                                                           Variation
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ID AAF9
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Human; variant thrombospondin 1; variant thrombospondin 4; SNP; polymorphism; vascular disease; coronary artery disease; forensics; myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; variant thrombospondin 1; variant thrombospondin 4; SNP; polymorphism; vascular disease; coronary artery disease; forensics; myocardial infarction; atherosclerosis; stroke; venous thromboembolism; pulmonary embolism; paternity test; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mccarthy JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and atherosclerosis.
                                                                                                                                                                               /standard_name= "single nucleotide polymorphism"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.6; DB 1; Length 21;
81.0%; Pred. No. 7.7e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Daley GQ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human gene single nucleotide polymorphism #1821.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the human gene SNPS shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bolk S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                       pulmonary embolism; paternity test; ds
                                                                                                                                                                                                                                                                                                                                                                                                  (WHED ) WHITEHEAD INST BIOMEDICAL RES.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1379 GGGCCGACCTCCTCACCAAGC 1399
                                                                                                                             Location/Qualifiers
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26-JUL-2000; 2000US-0220947P.
16-AUG-2000; 2000US-025724P.
                                                                                                                                              replace (11, T)
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                                                                                                                                                                                                                                                                                                                                                                                                                  (MILL-) MILLENNIUM PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAF97060 standard; DNA; 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-226749/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                    WO200118250-A2
                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-JUN-2001
                                                                                                                                                                                                                                                       15-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lander ES,
                                                                                                                               Key
Variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF97060;
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AAF97060/c
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Novel DNA encoding equine granulocyte-macrophage colony-stimulating factor, useful as adjuvant for vaccines and as non-specific immunostimulant.

Andreoni CMP:

Perez JM,

Bublot M,

(MERI-) MERIAL 10-JUN-1999;

WPI; 2001-080689/09.

08-JUN-2000; 2000WO-FR001590.

21-DEC-2000.

99US-0138843P,

The invention relates to the isolation of the sequence of the gene

Example 2; Page 13; 34pp; French.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Immunostimulatory; granulocyte-macrophage colony stimulating factor; horse; reverse transcriptase PCR; colony formation; blood; cytotoxicity; inflammation; vector; adjuvant; immunogen; vaccination; vaccine; ss; equine herpes; tetanus; Borrelia burgdorferi; rabies; 5'RACB; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                      Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and atherosclerosis.
                                                                          /*tag= a/standard_name= "single nucleotide polymorphism"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4; Indels
                                                                                                                                                                                                                                                                                                                          Bolk S, Daley GQ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 7 A; 1 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Equine GM-CSF gene 5' RACE primer JP730.
                                                                                                                                                                                                                                                                             (WHED ) WHITEHEAD INST BIOMEDICAL RES.
                                           Location/Qualifiers
replace(11,A)
                                                                                                                                                                                                                                                                                                                            Ireland JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1683 CTACATCTTCCTGCTTACTC 1703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example; Page 169; 242pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 ccacarcricaardarracre 1
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                                                                                                                                                                                    07-SEP-2000; 2000WO-US024503.
                                                                                                                                                                                                                 99US-0153357P.
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                                                                                                                                                                                                                                26-JUL-2000; 2000US-0220947P
                                                                                                                                                                                                                                                                                            (MILL-) MILLENNIUM PHARM INC
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                                                                                                                                                                                                                                                                                                                            Gargill M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-226749/23.
                                                                                                                        WO200118250-A2
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                                                                                                                                                                                                               10-SEP-1999;
                Homo sapiens
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                                                                                                                                                                                                                                                                                                                          Lander ES,
                                                            Variation
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                                               Key
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chooding a horse granulocyte-macroping. The squares of the squares of the squares of the square was isolated from horse lymphocytes by using a 5' and 3' RACE (rapid amplification of cDNA ends) method followed by a creverse transcriptase (RT) PCR method. The sequence shown here represents the 5' RACE primer JP730 used to isolate the 5' end of the equine GM-CSF compares. GM-CSF induces colony formation in various types of blood cells and particularly induces cytotoxicity of macrophages; stimulates antibody-capendent cytotoxicity, and causes recruitment of leucocytes to sites of inflammation. Vectors containing the gene or the protein itself, are useful as adjuvants in immunogenic or vaccinating compositions for burgdorferi, rabies etc. Also as non-specific stimulators of the immune cyserem. In a specific example, plasmid pJP097, containing the sequence for equine GM-CSF was used to transform CM-CXI cells and the transformants grown for 48 hours. The culture supernatant was then added to culture medium being used to grow porcine bone marrow cells. After 14 days, the mean number of colonies per cultures box was 12-15, compared with none for cells grown in absence of GM-CSF. Equine GM-CSF allows a contain of the manunce of immunogenic/vaccinating component required, and the colonies per culture defined to the amount of immunogenic/vaccinating component required, and the colonies per colonies are contained to required.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         on in the amount of immunogenic/vaccinating component required, induce a response in animals that would otherwise be non-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR primer for mechanically sensitive potassium channel gene fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; mechanically sensitive potassium channel; riluzole; TWICK; polyunsaturated fatty acid; arachidonic acid; hTRAAK; chromosome neuronal excitation; muscle excitation; cardiac rhythm; anoxia; hormone secretion; cardiac disease; vascular disease; ischemia; nervous system disorder; endocrinal disease; muscle disease; retinal disease; epilepsy; cardiac arrhythmia; neurodegeneration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.6; DB 1; Length 21;
31.0%; Pred. No. 7.7e+02;
lve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 21 BP; 3 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAH78643 standard; DNA; 21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
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PCR primers AAH78642-43 were used to amplify a gene fragment of the human mechanically sensitive potassium channel gene. The channel is activated by polyunsaturated fatty acids (particularly arachidonic acid (AA)) and by polyunsaturated fatty acids (particularly arachidonic acid (AA)) and by riluzole. The polypeptide is designated human TWICK-related AA-activated potassium channel (hTRAAK). The hTRAAK gene is located on chromosome 11g13. hTRAAK is involved in regulation of neuronal and muscle excitation, cardiac rhythm and secretion of hormones. Cells that express hTRAAK, designated to screen for modulators of hTRAAK activity. Such modulators are potentially useful for prevention or treatment, in humans and animals, of: cardiac and/or vascular disease, nervous system disorders associated with ischemia and anoxia; endocrinal diseases associated with anomalous hormone secretion or muscle diseases, and retinal diseases. Typical examples are epilepsy, cardiac arrhythmia and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, mechanically sensitive potassium channel; riluzole; TWICK, polyunsaturated fatty acid; arachidonic acid; hTRAAK; chromosome 11q13; neuronal excitation; muscle excitation; cardiac rhythm; anoxia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR primer for mechanically sensitive potassium channel gene fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New mechanically sensitive potassium channel, useful for treating cardiovascular diseases and in drug screening, is activated by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disease; epilepsy; cardiac arrhythmia; neurodegeneration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hormone secretion, cardiac disease, vascular disease, ischemia, nervous system disorder, endocrinal disease, muscle disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seguence 21 BP; 3 A; 7 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                        Maingret F;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1273 GAGACGTGGCCAGGCATCCTG 1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 15; 37pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGCCCGGCCAGGGATCCTG 21
                                                                                                                                                                                                                                                                                  (CNRS ) CNRS CENT NAT RECH SCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                         14-MAR-2001; 2001WO-FR000758.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-MAR-2001; 2001WO-FR000758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-MAR-2000; 2000FR-00003264
                                                                                                                                                                                                            14-MAR-2000; 2000FR-00003264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polyunsaturated fatty acids.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17; Conservative
                                                                                                                                                                                                                                                                                                                                                        Lesage F,
                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-590037/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
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WO200168670-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200168670-A2
                                                                                                                                                                                                                                                                                                                                                        Lazdunski M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-DEC-2001
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                                                                      20-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAH78640;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  retinal
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PCR primers AAH78639-40 were used to amplify a gene fragment of the human mechanically sensitive potassium channel gene. The channel is activated by polyunsaturated fatty acids (particularly arachidonic acid (AA)) and by riluzole. The polypeptide is designated human TWICK-related AA-activated potassium channel (hTRAAK). The hTRAAK gene is located on chromosome 11gl3. hTRAAK is involved in regulation of neuronal and muscle excitation, cardiac rhythm and secretion of hormones. Cells that express hTRAAK, designated to screen for modulators of hTRAAK activity. Such modulators are potentially useful for prevention or treatment, in humans and animals, of: cardiac and/or vascular disease; nervous system disorders associated with ischemia and anoxia; endocrinal diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Single nucleotide polymorphism; SNP; single nucleotide primer extension; SNPB; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia; polycystic kidney disease, osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                               associated with anomalous hormone secretion or muscle diseases; and retinal diseases. Typical examples are epilepsy, cardiac arrhythmia
                                                                                                             New mechanically sensitive potassium channel, useful for treating cardiovascular diseases and in drug screening, is activated by polyunsaturated fatty acids.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New genotyping oligonucleotide, useful for detecting the presence,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.8%; Score 14.6; DB 1; Length 21;
81.0%; Pred. No. 7.7e+02;
iive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seguence 21 BP; 3 A; 7 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNP specific lower PCR primer SEQ ID 2810.
                                                 Lesage F, Maingret F;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1273 GAGACGTGGCCAGGCATCCTG 1293
                                                                                                                                                                                              Disclosure; Page 15; 37pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gaggcccggccaggarccrg 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ORCH-) ORCHID BIOSCIENCES INC
               (CNRS ) CNRS CENT NAT RECH SCI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAH40014 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
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                                                                                     WPI; 2001-590037/66.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200129262-A2
                                                   Lazdunski M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-OCT-1999;
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Example 1; Page 57; 69pp; English.

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primer extension (SNPE) primers, and the sequences of regions flanking sites of single nucleotide polymorphisms SNPs. The present invention includes kits for determining the presence or absence of a SNP, using the oligonucleotides of the invention. The PCP primers are used to amplify a coligonucleotides are useful for genotyping a nucleic acid sample by performing a single-nucleotide primer extension reaction. The oligonucleotides are useful for genotyping a nucleic acid sample by performing a single-nucleotide primer extension reaction. The oligonucleotides are useful for determining the presence, absence or identity of a SNP and for genotyping nucleic acid samples, for e.g. to assess by association analysis the genotype of an individual or group of individuals, having a pathological phenotypic trait suspected of being caused by one or more SNPs. Phenotypic trait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g. agammaglobulinaemia, diabeter insiptious, Lesch-Nyhan syndrome, muscular of straits also include symptoms of or susceptibility to multifactorial disease of which a component is or may be genetic such as autoimmune diseases of including, rheumatoid arthritis, multiple sclerosis, inflammation, cancer, nervous system diseases and infection by pathogenic microorganism. The method is also useful in forensic investigations and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   paternity analysis. The present sequence represents a PCR primer specific for a human SNP containing DNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Maize; NPR1-interacting protein; disease resistance; sequence shuffling;
transgenic plant; signal transduction pathway; primer; ss.
absence or identity of single polynucleotide polymorphism in a nucleic
                                                                                                            - AAH40944 represent PCR primers, single nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Primer PHN33881, to identify proteins that interact with maize NPR1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 0.8%; Score 14.6; DB 1; Length 21; Best Local Similarity 81.0%; Pred. No. 7.7e+02; Matches 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 21 BP; 5 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            223 GATGAGAGTGGTGGTGGTGGC 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATGACAGAGGTGGTCATGGC 21
                                                                 Claim 1; Page 64; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (PION-) PIONEER HI-BRED INT INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAD08585 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-SEP-2001 (first entry)
                                                                                                            Sequences AAH37205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200146423-A2.
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                          acid sample.
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Novel maize NPR1-interacting polynucleotide, useful for engineering plants with improved disease resistance by increasing sensitivity or capacity of signal transduction pathway and for sequence shuffling.

WPI; 2001-408649/43.

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                                              encoding them. NRRI-interacting DNA is useful for modulating the level of NPRI-interacting DNA is useful for modulating the level of MPRI-interacting DNA in maize or in other plants, the plant can be engineered to improve resistance to pathogens by increasing the sensitivity or capacity of the signal transduction pathway. The plants containing altered NPRI expression are useful as universal disease susceptible plants. NPRI-interacting DNA is further useful for sequence shuffling. They are also used as probes. The invention also provides transgenic plants with increased disease resistance. The present sequence is an internal primer used to identify proteins that interact with NPRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to selenoproteins encoded in the genome of a virus, where the coding sequence of the selenoprotein is genetically engineered for expression in a nucleic acid construct. The invention also discloses a method for identifying selenoprotein coding sequences, for detecting certain viruses (e.g. HIV or Ebola), cancer and immune system disorders. The present sequence was used to illustrate the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                           Gaps
                                   invention relates to NPR1-interacting proteins and nucleic acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New selenoprotein for use in detecting certain viruses, e.g. human immunodeficiency virus (HIV) or Ebola, cancer and immune system
                                                                                                                                                                                                                                                                                                                          0
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                                                                                                                                                                                                                                                                                    0.8%; Score 14.6; DB 1; Length 21;
81.0%; Pred. No. 7.7e+02;
ve 0; Mismatches 4; Indels
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                                                                                                                                                                                                                                                    Sequence 21 BP; 7 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
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61.9%; Pred. No. 7.7e+02;
tive 4; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Taylor EW, Nadimpalli RG, Ramanathan CS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Col 69-70; 140pp; English.
                                                                                                                                                                                                                                                                                                                                                           821 AGAAGTCCCTCACCCTTGTCT 841
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                                                                                                                                                                                                                                                                                                                                                                                             21 AGAAGTCGCTCTCCTTTGGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Simian immunodeficiency virus.
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95US-0003112P.
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                                                                                                                                                                                                                                                                                                     Local Similarity 81.0%;
les 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABA01357 standard; RNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               YMDD oligonucleotide #17.
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Best Local Similarity
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01-SEP-1995;
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                                                                                                                                                                                                                                                                                      Query Match
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Matches
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The present invention relates to selenoproteins encoded in the genome of a virus, where the coding sequence of the selenoprotein is genetically engineered for expression in a nucleic acid construct. The invention also discloses a method for identifying selenoprotein coding sequences, for detecting certain viruses (e.g. HIV or Ebola), cancer and immune system disorders. The present sequence was used to illustrate the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Selenoprotein; HIV; Ebola virus; cancer; immune system disorder; ss.
                                                                                                                                                                                                                                                   New selenoprotein for use in detecting certain viruses, e.g. human immunodeficiency virus (HIV) or Ebola, cancer and immune system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New selenoprotein for use in detecting certain viruses, e.g. human immunodeficiency virus (HIV) or Ebola, cancer and immune system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.6; DB 1; Length 21; 1.9%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 7 A; 5 C; 4 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4; Mismatches
                                                                                                                                                                               Ramanathan CS;
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                                                                                                                                                                                                                                                                                                                          Disclosure; Col 69-70; 140pp; English.
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                                                                                                                                           (UYGE-) UNIV GEORGIA RES FOUND INC
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                                                                                       95US-0001203P.
                                                                                                        95US-0003112P
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                                                                                                                                                                               Nadimpalli RG,
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nes 13, Conservative
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                                                    12-JUL-1996;
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01-SEP-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nadimpalli RG, Ramanathan CS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Col 69-70; 140pp; English.
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CTGAAGCAGTACCTGGATGAC 882
                  |:|| || :|| cugauccaauacauggaugac 21
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                                                                                                                                                                                                                                   YMDD oligonucleotide #18.
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Matches 13; Conserv
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Homo sapiens.
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Best Local 9
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 RESULT 657
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The present invention relates to selenoproteins encoded in the genome of a virus, where the coding sequence of the selenoprotein is genetically engineered for expression in a nucleic acid construct. The invention also discloses a method for identifying selenoprotein coding sequences, for detecting certain viruses (e.g. HIV or Ebola), cancer and immune system disorders. The present sequence was used to illustrate the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a virus, where the coding sequence of the selenoprotein is genetically engineered for expression in a nucleic acid construct. The invention also discloses a method for identifying sehenoprotein coding sequences, for detecting certain viruses (e.g. HIV or Ebola), cancer and immune system disorders. The present sequence was used to illustrate the invention. (Updated on 07-AUG-2003 to correct OS field.)
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                                                                                                             0.8%; Score 14.6; DB 1; Length 21; 61.9%; Pred. No. 7.7e+02; tive 4; Mismatches 4; Indel8
                                                                                     Seguence 21 BP; 7 A; 5 C; 4 G; 0 T; 5 U; 0 Other;
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                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                      Mouse mammary tumor virus.
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                                                                                                                                      13; Conservative
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nes 13; Conserv
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03-JUL-2002
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The invention relates to a method for assessing the risk of prostate cancer in a human subject. The method involves determining the length of the contiguous CAG or CAA repeats in both AIBI (Amplified In Breast cancer 1) gene alleles or contiguous CAG, CAA or GGN repeats in the androgen receptor gene of the subject. The method is useful for assessing sequence is a DNA encoding human androgen receptor (AR) polyglycine tract. This sequence is used in the molecular analysis and assessment of the CAG and GGN repeat of AR gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Assessing the risk of acquiring or developing prostate cancer in a human subject, comprises determining the length of the contiguous CAG, CAA and/or GGN repeats in the AIBl gene and/or androgen receptor gene of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                               Human androgen receptor (AR) polyglycine tract encoding DNA
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81.0%; Pred. No. 7.7e+02;
iive 0; Mismatches 4; Indels
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AAD30438 standard; DNA; 21
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example from the present invention
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                                           Example 13; Col 44; 69pp; English.
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2001US-0272410P.
2001US-0272414P.
2001US-0272787P.
2001US-027292P.
2001US-02733048P.
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2001US-0277324P.
2001US-0278660P.
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2001US-0272404P.
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2001US-0299695P.
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2001US-0303242P.
                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                 Local Similarity 81.0 les 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200268652-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-FEB-2001;
28-FEB-2001;
28-FEB-2001;
02-MAR-2001;
02-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-MAR-2001;
02-MAR-2001;
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05-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-MAR-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-MAY-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-FEB-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                          25-MAR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                               primer; ss.
                                                                                                                                                                                                                                                                                                                                      ADH49177;
                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                           RESULT 660
                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                       ADH49177
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                                                                                                                                                                                                                     The invention relates to a recombinant dimethyl sulphide (DMS):acceptor oxidoreductase [1] or its subunit selected from recombinant alpha, beta, delta and gamma subunits. [1] is useful for oxidising prochiral organic sulphides to form sulphoxide enantiomers for chiral drug synthesis. [1] is expressed in a transformed bacterium. The enantiomer formed is useful for producing a chiral drug. (I) is useful for synthesis of optically-active functional groups of drug. DNA encoding [1] is useful for producing a strain of DMS:acceptor oxidoreductase- deficient Rhodovulum oxidoreductase activity is unwanted. ABK53751-ABK53805 represent R. sulfidophilum DMS:acceptor oxidoreductase subunit coding sequences and
                                                                                                                                                      New recombinant dimethyl sulfide:acceptor oxidoreductase or its subunits, useful for oxidizing prochiral organic sulfides to form sulfoxide enantiomers for chiral drug synthesis.
                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumour necrosis factor receptor 2; TNFR2; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                            Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                  4; Indels
                                                                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 3 A; 11 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                         Score 14.6; DB 1;
Pred. No. 7.7e+02;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human INFR2 forward PCR primer SEQ ID NO:4.
                                                                                                                                                                                                                                                                                                                                                                                                                                        346 AAGATGGGGTCTGATGGGGAG 366
                                                                                                                                                                                                  Claim 15; Page 46; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGATGGGGACGGATGGCGAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВР
                                                                                                                                                                                                                                                                                                                                               PCR primers of the invention
                                                                                                                                                                                                                                                                                                                                                                                            0.8%;
81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-APR-2001; 2001US-00844634
                                         21-AUG-2001; 2001WO-AU001033
                                                                 21-AUG-2000; 2000AU-00009559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-APR-2001; 2001US-00844634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABQ74754 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-OCT-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 81.09
Matches 17; Conservative
                                                                                                            Mcewan AG;
                                                                                      (UYQU ) UNIV QUEENSLAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bennett CF, Watt AT;
                                                                                                                                 WPI; 2002-280922/32.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        primer; ss
WO200216570-A1
                                                                                                            Mcdevitt CA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US6410324-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-JUN-2002.
                    28-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABQ74754;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 659
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, NOVX; atherosclerosis; hypertension; obesity; cancer; cytostatic;
hypotensive; antiarteriosclerotic; anorectic; gene therapy; NOV68; PCR;
New compounds antisense to nucleic acid encoding human or mouse tumor necrosis factor receptor 2 are useful to treat disease associated with mouse tumor necrosis factor receptor 2 expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 21 BP; 4 A; 11 C; 0 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                       The present invention relates to novel human NOVX proteins, where X is any number from 1 to 91 and their coding sequences (see ADH48717-ADH48930). The proteins and coding sequences are useful for preventing or treating disorders or syndromes e.g. atherosclerosis, hypertension, obesity or cancer. The present sequence was used in an example from the
                                                                                                                                                                            Peyman JA;
Stone DJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Inflammatory bowel disease; Crohn's disease; ulcerative colitis; INF; tumour necrosis factor; polymorphism; haplotype; diagnosis; Caucasian; antiinflammatory; gene therapy; INF antagonist; OCT1; EMSA; electrophoretic mobility shift assay; probe; ss.
                                                                                                                               Alsobrook JP, Anderson DW, Ballinger RA, Boldog FL, Burgess CE; Casman SJ, Ellerman KE, Gangolli EA, Gerlach VL, Gilbert JA; Gorman L, Guo X, Gusev VY, Kekuda R, Li L, Liu X, Malyankar UM; Miller CE, Millet I, Padigaru M, Patturajan M, Pena CEA, Peyman J Kastelli L, Shenoy SG, Shimkets RA, Smithson G, Spytek KA, Stone Taupier RJ, Tchernev VT, Vernet CAM, Zerhusen BD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                 New NOVX polypeptides or polynucleotides, useful for preventing or treating disorders or syndromes e.g., atherosclerosis, hypertension,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human OCT1 consensus binding site EMSA probe top strand, OCT1 F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 8 A; 2 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                             Example 2; Page 833; 923pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     331 GTGCACGAGGACTTGAAGATG 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGCAAGAGGACAAGGAGATG 21
13-AUG-2001; 2001US-0311981P.
16-AUG-2001; 2001US-0312858P.
17-AUG-2001; 2001US-0313280P.
29-AUG-2001; 2001US-03128614P.
17-SEP-2001; 2001US-0322818P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADB92791 standard; DNA; 21 BP
                                                                        25-FEB-2002; 2002US-00322818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-OCT-2002; 2002WO-GB004582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-OCT-2001; 2001GB-00024315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Van Heel D, Lench N;
                                                                                                     (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                       WPI; 2002-698672/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-393451/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
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                                                                                                                                                                                                                                                                                                   obesity or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003031651-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                   invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
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The invention relates to a method for determining the susceptibility of an individual to inflammatory bowel disease. The method comprises screening the genetic material of the individual to determine which allele of the TWF (tumour necrosis factor) -8570/T polymorphism is present. The invention also relates to a method of determining the susceptibility to, or confirming the diagnosis of, Crohn's disease in a causasian individual comprising screening the genetic material of the subject for the presence of the TWF -1031C/-863C/-857C/-308G haplotype.

The invention additionally encompasses gene therapy for Crohn's disease. The invention of genetic material of the causasian with the -1031C/-863C/-857C/-308G haplotype.

The introduction of genetic material comprising the TWF -1031T, -863T, or preventing TWF production for the treatment of inflammatory bowel disease. Inflammatory bowel disease (IBD) is a chronic inflammatory bowel disease (IBD) is a chronic inflammatory bowel disease (IBD) is a chronic inflammatory bowel disease. The invention is bases on the confers susceptibility to Grohn's disease. The invention is bases on the confers susceptibility to Grohn's disease in Causasians. The TWF -857 allele acts independently of the known NOD2 gene polymorphisms of the invention involve additional determination of these NOD2 the invention involve additional determination of these NOD2 the invention involve additional determination of these NOD2 confers susceptibility to inflammatory bowel disease, such as ulcerative colities or Crohn's disease. The methods are also useful for confirming Che diagnosis of a Caucasian subject as having Crohn's disease. The methods are also confere the part of the part of a part of the part of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             determining the response of a patient to treatment. The agents and the genetic material, comprising TNF -1031T, -863T, -857T and/or -308A alleles, or TNF -1031T/-663T/-857T-308A haplotype, are useful in manufacturing a medicament for preventing or treating Crohn's disease in a caucasian subject. Sequences ADB92791-ADB92792 represent the top and bottom strands of a consensus OCT1 binding site EMSA (electrophoretic mobility shift assay) probe used in the example of the invention. OCT1 is
Determining the susceptibility of a Caucasian subject to inflammatory bowel disease such as Crohn's disease, comprises screening the genetic material of the subject to determine which allele of the TNF -857C/T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protease; immunomodulator; antigen; antigen-presenting cell; reporter;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.6; DB 1; Length 21;
31.0%; Pred. No. 7.7e+02;
ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic acid encoding caspase-2 protease cleavage signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 7 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1506 CATATTTGCACTAAAGGAGAT 1526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21 ccrarrigcarraaggagcr 1
                                                                                                                                                                Example; Page 19; 39pp; English.
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Best Local Similarity 81.0
Matches 17; Conservative
                                                                                                     polymorphism is present.
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20-NOV-2002; 2002WO-US037123.

WO2003065977-A2. Unidentified.

14-AUG-2003.

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Hirano N,
                                                                                                              ADC64462;
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                                                                                         Query Match
                                                                                  sequence
                                                                                                       RESULT 663
                                                                                            Matches
                                                                                                         ADC64462
ID ADC6
XX
AC ADC6
XX
DT 18-D
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01-APR-2002; 2002JP-00099422. Homo sapiens. US6579972-B1 09-SEP-1999; 19-MAR-1993; 02-JUN-1995; 15-JAN-2004 24-DEC-2002. 17-JUN-2003 Rattus sp. Synthetic ADD35311; Query Match Matches RESULT 664 ADD35311/c à qq The invention tradects to a new vertebrate cert. This is a complete or a fusion polypeptide. The polypeptide consists of an antigen fused in frame at its N-terminus to a heterologous reporter polypeptide, where the call surface by the exceptions antigen.

The service of an antigen presenting cell. The vertebrate cell further comprises a nucleic acid encoding an exogenous immunoregulatory molecule. It is a human immortalised cell. I the vertebrate cell further comprises a nucleic acid encoding an exogenous immunoregulatory molecule. It is a human immortalised cell. I the vertebrate cell, a kupfer cell, a mast cell. The antigen is fused to the heterologous reporter a fibrophast cell. The antigen is fused to the heterologous reporter polypeptide through a linker polypeptide. It is located at the Cterminus of the fusion polypeptide. The linker is cleavable by a cell-associated protease, which is an endogenous protease or an exogenous protease. The antigen corresponds to the nucleic acid encoding an antigen fused in frame at its N termina to a heterologous reporter polypeptide is 8 to 10 amino acids in length. The nucleic acid encoding an exogenous antigen-presenting comprises a class I molecule, which is an HIA or H-2 molecule. The heterologous reporter polypeptide comprises a creen Fluorescent Protein. It comprises a postion of a cell surface protein that is expressed on the surface of a cell it comprises a portein that is expressed on the surface of a cell permits to an antibody specific for the cell cepture polypeptide comprises a costimulatory molecule an antibody and/or an expense. · 0 represents a nucleic acid sequence encoding a caspase-2 protease cleavage signal. Such a protease is useful to the invention for cleaving the antigenic peptide from the heterologous polypeptide at the linker New vertebrate cell comprising a nucleic acid encoding an exogenous antigen-presenting molecule or encoding a fusion polypeptide comprising an antigen, useful for preparing a composition for modulating an immune molecule, an accessory molecule, a cytokine, a chemokine and/or an adhesion molecule. The costimulatory molecule is CD80 or CD83. The antigen is a tumour-specific antigen. The vertebrate cell comprising a nucleic acid encoding an exogenous antigen-presenting molecule or response. The current invention relates to a new vertebrate cell. This cell comprises a Gaps encoding a fusion polypeptide comprising an antigen, is useful for preparing a composition for modulating an immune response. The curr · 0 0.8%; Score 14.6; DB 1; Length 21; 31.0%; Pred. No. 7.7e+02; 4; Indels Sequence 21 BP; 2 A; 5 C; 11 G; 3 T; 0 U; 0 Other; Rat ERK-3 designed oligonucleotide probe, El3, #2 0; Mismatches Disclosure; Page 36; 91pp; English. 372 CCAGGCTTCAGCCACGTCCTC 392 21 CCAGCCGTCGGCCACGTCCAC 1 Nadler LM; (DAND ) DANA FARBER CANCER INST. 20-NOV-2001; 2001US-0331928P. 81.0%; ADC64462 standard; DNA; 21 (first entry) 17; Conservative Butler M, WPI; 2003-636934/60. Best Local Similarity 18-DEC-2003

.. 0 claimed. The antibody is useful for preparing a composition for treating marks. Sassociated diseases e.g. diabetes mellitus. Alzhaimer's disease or peripheral neuropathies in a mammal. The polymucleotide encoding the protein is also useful for treating these diseases using gene therapy techniques. The sequence presented is an oligonucleotide probe, version #2, which corresponds to a region of the rat ERK-3 coding sequence, and was used designed as a 32 fold degenerate sequence from ERK1, ERK2 and New antibody, useful for preparing a composition for treating extracellular signal regulated kinase - 5-associated diseases in a mammal e.g., diabetes mellitus, Alzheimer's disease or peripheral neuropathies. ss; antibody; extracellular signal regulated kinase-5; hERK-5; ERK; affinity to the human extracellular signal regulated kinase (hERK)-5 protein. ERKs are also referred to as mitogen activated protein (MAP) kinases. The hybridoma that produces the monoclonal antibody is also Gaps The invention discloses a new antibody comprising a specific binding . 0 mitogen activated protein kinase; MAP kinase; hybridoma; diabetes mellitus; Alzheimer's disease; peripheral neuropathy; gene therapy; antidiabetic; neuroprotective; ERK-3; probe. 0.8%; Score 14.6; DB 1; Length 21; 66.7%; Pred. No. 7.7e+02; Indels (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN. Sequence 21 BP; 3 A; 4 C; 5 G; 5 T; 0 U; 4 Other; 4; Mismatches ERK3 to detect the human ERK-5 cDNA clone. human; KIAA0172; cancer; ss; PCR; primer. Human KIAA0172 associated primer #12. 1156 ATGTGGGGTGTGGGCTGCATC 1176 Ullrich A; 1 AYATKTGGKCTRGGCTGCATC 21 Example 1; Col 38; 40pp; English. BP. 99US-00393212. 93US-00029404 95US-00459953 ADD35311 standard; DNA; 21 (first entry) 14; Conservative Lechner C, Moller NP, WPI; 2003-634515/60. Local Similarity JP2002369696-A.

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Tue Nov
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(DOKU-) (KAZU-) INFO-)

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Interactory reaction vessel (tube) That has, on its base, a carrier of which probe molecules are immobilised in predetermined regions. The base includes an opening for receiving the carrier and is optically is made of glass and/or selection of the detection surface. The carrier is made of glass and/or silicon and the vessel is made of glass (optionally coated with plastics), glass ceramic, plastics or metal. Probes are present in a substance library, especially proteins (e.g. antibodies, receptors and/or membrane proteins), peptides (receptor ligands, paramaceutically active peptides and/or hormones) or nucleic acids (DNA and/or RNA). The detection system is a camera, especially a charge-coupled device or CNOS camera, optionally fitted with an optical read-out system. The device or SNOS camera, optionally fitted with an optical read-out system. The device or SNOS camera, optionally fitted with an optical read-out system. The device may include a light source that ensures homogeneous coupled device or NOS camera, optionally an array of diffusely irradiating sources that are superimposed. These sources are lasers, LED, plane contrains optical filters and optionally a filter exchanger, a structured to ensure homogeneous illumination. The system preferably also contains optical filters and optionally a filter exchanger, a temperature control unit and a computer that collects signal intensities from the detector and converts them to an analogue image. The reaction vessels came arranged for sequential examination. Target molecules are contacted with probes and any interaction detected, e.g. from conventional labels but most preferably the interaction results in precipitation on the array of probes and the time progression of precipitation of a silver salt (nitrate, ceptate or teatrate) by formaldehilder or hydroguinone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a device for performing microarray tests, i.e. interaction of a target with protein, peptide or nucleic acid probes, e.g. for biomedical, including hybridisation or immunological, tests. The reaction vessel is of simple construction, is easy and inexpensive to make and is compatible with other laboratory apparatus (e.g. bench centrifuges and pipettes). Micro-array tests can be performed in a single vessel, reducing the risk of contamination and only relatively simple detectors are required. ADJ99048-ADJ99087 represent probes used to detect the cyp2D6 gene which encodes human cytochrome-P450 and are used to illustrate the method of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Preparation may occur in the presence of a metal (especially gold) clusters or colloidal particles, coupled to the target, and precipitation is detected by reflection, absorption or scattering of a light beam passed through the precipitate. The new vessel is used as a component in
interactions between molecular targets and probe molecules comprising a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          probe; ss; chemical modification; methylation; array; CpG island; tumour suppressor; p16; human; H69; H1618.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human DNA probe used to immobilise CpG methylated DNA SeqID 164.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 21 BP; 3 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1588 TTCCGCGTGGTGGACACCGAG 1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGCGCAAGGTGGACACGGAG 1
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Best Local Similarity
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                                                                                                                                                                                                                                 Human KIAA0172 gene encoding a sequence of 1194 amino acids, useful for diagnosis and treatment of cancer and for development of effective growth inhibitors of cancer cells.
                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to new human KIAA0172 gene. The KIAA0172 gene and polypeptide are useful for detection and treatment of cancer. The present sequence represents KIAA0172 associated primer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention describes a novel reaction vessel for detecting specific
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.6; DB 1; Length 21; 11.0%; Pred. No. 7.7e+02; ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      detection; probe; microarray; hybridisation; cyp2D6; human; cytochrome-P450; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 10 A; 0 C; 8 G; 3 T; 0 U; 0 Other;
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                                                                         DOKURITSU GYOSEI HOJIN SANGYO GIJUTSU SO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag= a
/mod_base= OTHER
/note= "5'-NH2 modification"
                                                                                                                                                                                                                                                                                                                                           Example 3; SEQ ID NO 47; 40pp; Japanese.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFO GENES CO LTD.
ZH KAZUSA DNA KENKYUSHO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human cyp2D6 probe G1749C-WT+4.
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                        30-MAR-2001; 2001JP-00101401.
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Ellinger T;
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                                                                                                                                                                                   WPI; 2003-495749/47.
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Matches 17; Conserv
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Fischer J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
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RESULT 665 ADJ99056/c

HANDER DE STANDER DE S

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Gaps

Balog RP;

Luebke KJ,

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This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In
                                                                                                                                                                                                                          Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pi6 from two human lung tumour cell lines H69 and H161B. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  probe; ss; chemical modification; methylation; array; CpG island;
tumour suppressor; p16; human; H69; H1618.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%; Score 14.6; DB 1; Length 21; larity 81.0%; Pred. No. 7.7e+02; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21 BP; 3 A; 12 C; 0 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                           Example 1; SEQ ID NO 164; 210pp; English.
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                                           27-JUN-2001; 2001US-0301370P
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                             Minna JD,
                                                                            (GARN/) GARNER H R.
(MINN/) MINNA J D.
(LUEB/) LUEBKE K J.
(BALO/) BALOG R P.
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LUEBKE K J.
BALOG R P.
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ses 17; Conserv
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                                                                                                                                                              Garner
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Matches
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This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analyshing the methylation pattern of a region of the promoter for the tumour suppressor gene pic from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA. Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA. Gaps probe; ss; chemical modification; methylation; array; CpG island; tumour suppressor; p16; human; H69; H1618. Human DNA probe used to immobilise CpG methylated DNA SeqID 200. .. 0 Score 14.6; DB 1; Length 21; Pred. No. 7.7e+02; 0; Mismatches 4; Indels Sequence 21 BP; 3 A; 12 C; 1 G; 5 T; 0 U; 0 Other; Balog RP; Luebke KJ, Balog RP; Example 1; SEQ ID NO 864; 210pp; English Luebke KJ, 221 TGGATGAGAGTGGTGGTG 241 21 TGGATGAGAGTGGGAGAGGCG 1 BP 0.8%; 81.0%; 27-JUN-2002; 2002US-00184085. 27-JUN-2001; 2001US-0301370P. ADJ13073 standard; DNA; 21 20-MAY-2004 (first entry) Query Match
Best Local Similarity 81.0% Garner HR, Minna JD, Garner HR, Minna JD, WPI; 2003-874843/81. WPI; 2003-874843/81. (GARN/) GARNER H R. (MINN/) MINNA J D. (LUEB/) LUEBKE K J. BALO/) BALOG R P. US2003152950-A1. Homo sapiens. 14-AUG-2003. ADJ13073; RESULT 668 ADJ13073/c δ Db .,

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medified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical medification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pl6 from two human lung tumour cell lines H69 and H1618. This oligonucleoclide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of
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to be analyzed, treating DNA with chemical reagents that result in
different base sequences, and determining sequence of resulting DNA.
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                                   This invention relates to a novel method for analysing chemically
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ss; chemical modification; methylation; array; CpG island; suppressor; p16; human; H69; H1618.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human DNA probe used to immobilise CpG methylated DNA SeqID 236.
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0
                                                                                                                                                                                                                                                                                                                                       Score 14.6; DB 1; Length 21;
Pred. No. 7.7e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                           Sequence 21 BP; 3 A; 12 C; 1 G; 5 T; 0 U; 0 Other;
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Example 1; SEQ ID NO 200; 210pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                   221 TGGATGAGAGTGGTGGTG 241
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-874843/81.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MINNA J'D.
LUEBKE K J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GARNER H R.
                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BALOG R P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003152950-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-AUG-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Garner HR,
                                                                                                                                                                                                                                                                             invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADJ13109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BALO/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GARN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MINN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (LUEB/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 669
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probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour supprises or gene pl6 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human; ss; short interfering RNA; siRNA; angiogenesis; vascular endothelial growth factor; VEGF; VEGF receptor; Flt-1; Flk-1/KDR; kinase domain region; diabetic retinopathy; age-related macular degeneration; inflammatory disease; psoriasis; rhemmatoid arthritis; cancer; breast; retinoblastoma; Wilm; stumour; lymphoma; cytostatic; antidiabetic; ophthalmological; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               strands, useful for inhibiting expression of human vascular endothelial growth factor mRNA, for treating angiogenic disease, e.g. diabetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human Flk-1/KDR DNA sequence, a target for siRNA inhibition SeqID 576.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel short interfering RNA (siRNA) comprises sense and antisense RNA
                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                           4; Indels
                                                                                                                                                                                                    Score 14.6; DB 1; Length Pred. No. 7.7e+02; 0; Mismatches 4; Indels
                                                                                                                                                               Sequence 21 BP; 3 A; 13 C; 0 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    antipsoriatic, antirheumatic, antiarthritic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; SEQ ID NO 576; 218pp; English.
                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                     TGGATGAGAGGGGGAGAGGTG 1
                                                                                                                                                                                                                                                                                  TGGATGAGAGTGGTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-JUL-2003; 2003WO-US022444.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-JUL-2002; 2002US-0398417P.
14-NOV-2002; 2002US-00294228.
                                                                                                                                                                                                  0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYPE-) UNIV PENNSYLVANIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                       Local Similarity 81.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Folentino MJ, Reich SJ;
                                                                                                                                                                                                                                                                                                                                                                                                                         ADJ97803 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          retinopathy and cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2004-203472/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2004009769-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-MAY-2004
                                                                                                                               invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADJ97803;
                                                                                                                                                                                                                                                                                    221
                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                  RESULT 670
                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                         ADJ97803
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DNA

Device with substance to aid adhesion of biological material aptamer #4.

(first entry)

23-SEP-2004

ADQ30710 standard; DNA; 21 BP

aptamer; ss; implant; biological material adhesion; bioreactor.

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ADQ30710/c
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                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Predicting antisense activity of an oligonuclectide for down-regulating expression of an RNA, comprises developing an artificial neural network, determining counts of mapped sequence motifs, and obtaining a output of
                     cancers including breast, retinoblastoma, Wilm's tumour and lymphoma. Accordingly, these compositions exhibit cytostatic, antidiabetic, ophthalmological, antinflammatory, antipsoriatic, antirheumatic and antiarthritic activities. This oligomuclectide is a human Flk-1/KDR oligo, a target for siRNA inhibition of the invention.
                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to the method for making an artificial neural network embodied on a computer-readable medium for predicting
arthritis. Furthermore, it can be used to treat various
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense activity; down-regulation; antisense; ICAM; human; ss.
                                                                                                                                                                                                                                                                                 ·.
                                                                                                                                                                                                                               Score 14.6; DB 1; Length 21; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matveeva OV, Giddings MC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 21 BP; 3 A; 14 C; 0 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                            Sequence 21 BP; 11 A; 7 C; 2 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human ICAM-specific antisense oligonucleotide #3.
                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 13; 25pp; English.
                                                                                                                                                                                                                                                                                                                                    972 ACACCGAGACCTCAAGCCCCA 992
                                                                                                                                                                                                                                                                                                                                                                                   AAACCGAGACCTAAAAACCCCA 21
                                                                                                                                                                                                                         0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-JAN-2002; 2002US-00050888.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-JAN-2001; 2001US-0262993P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (UTAH ) UNIV UTAH RES FOUND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gesteland RF, Atkins JF,
                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADO03877 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2004-364070/34.
                                                                                                                                                                                                                                               Local Similarity
es 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2004073376-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   activity.
                                                                                                                                                                                                                                                                                                                                                                                 Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADO03877;
                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AD003877/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 671
                                                                                                                                                                                                                                                                                 Matches
SXGGGGGG
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Device coated with aptamers for binding specific biological materials, useful e.g. as stent or component of extracorporeal circulation system, also new aptamers specific for endothelial precursor cells.

Claim 15; SEQ ID NO 4; 31pp; German.

(UYTU-) UNIV TUEBINGEN EBERHARD-KARLS.

Schluesener H, Wendel WPI; 2004-517421/49.

17-DEC-2002; 2002DE-01058924.

10-DEC-2003; 2003WO-EP013989.

WO2004055153-A2.

01-JUL-2004

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               that contacts tissue and/or liquids of the human or animal body and is at least partly coated with a substance that mediates binding of biological materials. The new feature is that this substance is an aptemer. The device is particularly an implant, e.g. a stent, vascular prosthesis, heart valve, joint etc., but may also be a component of an extracorporeal circulation system, a nanomaterial for tissue engineering and vascular surgery, a catheter, contact lens, storage device for blood etc., also a bioreactor for isolation and culture of selected cell types, for production of substances or for growing organ replacements. The present sequence is an aptemer suitable for use in the device of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Device with substance to aid adhesion of biological material aptamer #2.
The present invention relates to a device that has at least one surface
                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        implant; biological material adhesion; bioreactor
                                                                                                                                                                                                                                                                                                      Score 14.6; DB 1; Length 21; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                    4; Indels
                                                                                                                                                                                                                                                           Seguence 21 BP; 0 A; 7 C; 14 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                            555 CCTCAGCCGCCGCCTCCGTCG 575
                                                                                                                                                                                                                                                                                                                                                                                                                                     Н
                                                                                                                                                                                                                                                                                                                                                                                                                                     concocidente
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                    0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADQ30708 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                    17, Conservative
                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2004055153-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aptamer; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         673
                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                 pp
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Gaps

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Score 14.6; DB 1; Length 21; Pred. No. 7.7e+02; 0; Mismatches 4; Indels

0.8%;

Query Match
Best Local Similarity 81.09
Matches 17; Conservative

TGAGAGTGGTGGTGGCGG 245

225 21

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readadecenadrecredede 1

RESULT 672

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The sequences given in AAQ41767-825 represent sequences which are bound in an electrophoretic mobility shift assay (EMSA) by Myc. The isolated sequences contain the central E box core of CACGTG which binds very weakly with Myc homo-oligomers (CI complex), but more tightly with Myc hetero-oligomers (CZ complex). The CZ complex requires a 26-29 kD factor in addition to Myc. The additional factor copurifies with Myc and resembles Max protein. A second copurifying 40-50 kD factor has been identified (forming C2' complex). Sites selected by the C2' complex contain the core CAGCTG which bears remarkable homology to a myogenin binding site (see AAQ41763). Oligomucleotides containing the E box can bused in the purification of Myc from a mammalian source. See also thinbit c-Myc oncoprotein activity. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Identifying the nucleotide at specific position in a target sequence for detecting disease-related point mutations involves extending a primer that binds adjacent to the specific site to incorporate a labeled
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel method for determining the identity of
                                                    of c-Myc protein from mammalian cells - and detection of c Myc tors for use in cancer therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Detection, primer extension, point mutation, pathogenicity, therapy, cancer, genetic disease, polymorphism, apolipoprotein E, ApoE, human,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ^ Match 0.8%; Score 14.6; DB 1; Length 22; Local Similarity 81.0%; Pred. No. 8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 22 BP; 6 A; 9 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human apolipoprotein E PCR primer Pl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1263 CCCAACTGAGGAGACGTGGCC 1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Col 9-10; 14pp; English
                                                                                                                        Disclosure; Fig 7a; 101pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90US-00482005.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ44872 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Syvanen A, Soederlund HE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17; Conservative
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                 WPI; 1993-167291/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             deoxynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cancer; genetic
PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-APR-2000
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                                                                                 inhibitors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ44872;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                             Prodn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                      The present invention relates to a device that has at least one surface that contacts tissue and/or liquids of the human or animal body and is at least partly coated with a substance that mediates binding of biological materials. The new feature is that this substance is an apcamer. The heart valve, joint etc., but may also be a component of an extracorporeal circulation system, a nanomaterial for tissue engineering and vascular surgery, a catheter, contact lens, storage device for blood etc., also a bloreactor for isolation and culture of selected cell types, for production of substances or for growing organ replacements. The present sequence is an aptamer suitable for use in the device of the invention.
                                                                                                                                                                                                                             Device coated with aptamers for binding specific biological materials, useful e.g. as stent or component of extracorporeal circulation system, also new aptamers specific for endothelial precursor cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Myc; c-myc; mammalian; E box; cancer; therapy; C1; C2; C2'; complex; homo-oligomer; hetero-oligomer; myogenin; Max; oncoprotein; primer; probe; electrophoretic mobility shift assay; EMSA; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seguence 21 BP; 0 A; 14 C; 7 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag= a
/note= "C2 complex binding site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Baculovirus C2 complex binding site #6.
                                                                                                       (UYTU-) UNIV TUEBINGEN EBERHARD-KARLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                 Claim 15; SEQ ID NO 2; 31pp; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           555 CCTCAGCGGCGGCCTCCGTCG 575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 ccecceccecceccecce 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
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                                                           17-DEC-2002; 2002DE-01058924
                   10-DEC-2003; 2003WO-EP013989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ41809 standard; DNA; 22
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(first entry)
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                                                                                                                                                Schluesener H, Wendel
                                                                                                                                                                                        WPI; 2004-517421/49.
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nes 17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-OCT-1991;
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specific nucleotide at one or more defined sites in a target nucleic acid polymer involves formation of a detectable primer extension product if the specific nucleotide is present at the defined site in the target nucleic acid. The method is specifically used to detect point mutations which are associated with altered pathogenicity or resistance to therapy to a microorganism, particularly human immune deficiency virus or with cancer or a genetic disease (or susceptibility to it) in humans, but more generally can be used to detect mutations in RNA or DNA from animals, cancer or a genetic disease (or susceptibility to it) in humans, but more generally can be used to detect mutations in RNA or DNA from animals, cancer or microorganisms. By selecting a primer that binds adjacent to the specific site, variations at this site can be detected following incorporation of only a single dNTP. The method requires only a few, simple manipulations, making is suitable for routine use, and allows down to 0.5% of this population. The method is easily automated. This sequence represents a PCR primer used to detect a polymorphism in human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 22 BP; 9 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               apolipoprotein E (apoE)
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Score 14.6; DB 1; Length 22; Pred. No. 8e+02; 0; Mismatches 4; Indels 1301 AGGAGTTCAAGACATACAACT 1321 0.8%; Best Local Similarity 81.0 Matches 17; Conservative Query Match

22

AGGAGTTGAAGGCCTACAAAT

a

à q

. 0

Gaps

; 0

AAC72227 standard; DNA; 22 09-FEB-2001 (first entry) AAC72227; RESULT 676 

Single nucleotide polymorphism PCR primer #1371.

Single nucleotide polymorphism; SNP; human; genetic disease; disease susceptibility; cardiovascular system; endocrine system; neurological system; forensic testing; paternity testing; PCR primer; ss.

Homo sapiens

WO200058519-A2.

05-OCT-2000

30-MAR-2000; 2000WO-US008440.

99US-0127248P 31-MAR-1999;

(WHED ) WHITEHEAD INST BIOMEDICAL RES. (AFFY-) AFFYMETRIX INC.

Lander ES; Ireland JS, Daley GQ, Sklar P; Cargill M, Patil N, S Lipshutz RJ, Altshuler D,

WPI; 2000-611722/58.

Nucleic acid selected from one of 106 genes comprising single nucleotide polymorphisms, allele-specific oligonucleotides to the genes are useful for phenotypic correlations, forensics, paternity testing, medicine and genetic analysis.

Claim 8; Fig 5; 214pp; English

The present invention is concerned with a number of human single nucleotide polymorphisms (SNPs) which the inventors identified in human genes. These SNPs can be used in disease diagnosis and prediction of an individual's susceptibility to disease, in forensic and paternity testing and in genetic mapping. In particular, the SNPs of the invention can be used to diagnose susceptibility to diseases of the cardiovascular,

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Locus-specific, separate amplification of exon 2, exon 3, and/or exon 4 of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles using defined primer sets, useful for subtyping or typing of HLA Class I alleles.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to a method for the locus-specific, separate amplification of exon 2, exon 3, and/or exon 4 of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles. The method is useful for subtyping or typing of HLA class 1 alleles. The present sequence is an amplification primer used in the method
endocrine and neurological systems, such as coronary artery disease, schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
                                                                                                            Gaps
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                                                                                                                                                                                                                                                                                                                     Reverse primer #26 used for amplification of HLA-A exon 2.
                                                                                                            4; Indels
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                                                                                  DB 1; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 22 BP; 1 A; 10 C; 7 G; 3 T; 0 U; 1 Other;
                                                      Sequence 22 BP; 9 A; 3 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                 HLA-A; HLA-B; HLA-C; typing; primer; human; ss.
                                                                                0.8%; Score 14.6; DB 1
81.0%; Pred. No. 8e+02;
iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.6; DB 1
88.2%; Pred. No. 8e+02;
ive 1; Mismatches
                                                                                                                                       1497 CACTACTICCATATTIGCACT 1517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rossau R;
                                                                                                                                                               21 CATTAATTACGTATTTGCACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 4; Page 35; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 265
                                                                                                                                                                                                                                     AAC80114 standard; DNA; 22 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22 TGHCCCGGGAGAGGCCC
                                                                                                                                                                                                                                                                                          (first entry)
                                                                                               Local Similarity 81.0
nes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (INNO-) INNOGENETICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-647426/62.
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tes 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                    WO200061795-A2
                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-JUN-1999;
                                                                                                                                                                                                                                                                                           03-MAY-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                19-OCT-2000.
                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                AAC80114;
                            diseases
                                                                                  Query Match
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                                                                                                          Matches
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autoimmune disease; inflammatory arthritis; cancer; wound; genotyping; viral infection; bacterial infection; fungal infection; COPD; GBA; Chronic obstructive pulmonary disease; enterocolitis; automated genetic bit analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3; Page 926; 977pp; English.
                                                                                                                                                                                                                                                               (BRIM ) BRISTOL-MYERS SQUIBB CO.
                                                                                                                                                                                                  04-DEC-2000; 2000US-0251015P.
23-JAN-2001; 2001US-0263678P.
02-MAR-2001; 2001US-0273037P.
                                                                                                                                                                         03-DEC-2001; 2001WO-US047235
                                                                                                                                                                                                                                                                                                                                                                                                                                    cancer, viral, bacte
autoimmune diseases.
                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-619265/66.
                                                                                                                                                                                                                                                                                                                        Isuchihashi Z,
                                                                                                            WO200261131-A2
                                                                                                                                                                                                                                                                                             (HUIL/) HUI L.
                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                           Swanson BN,
                                                                                                                                            08-AUG-2002.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             strains useful for identification and validation of gene products as targets for therapeutic agents, for creating a collection of identified essential genes, and screening assays for the discovery of new drugs. The invention provides the GRACE (gene replacement and conditional expression) method for the construction of mutant organisms referred to as GRACE strains of the organism. The invention can be applied to any organism, particularly a pathogenic fungus e.g. Candida albicans, Aspergillus funigatus and Cryptococcus neoformans. The methods are useful to identify agents that may be used in the treatment of fungal infections. AAS23687.AAS23747 represent primers A #1-61 used as probes
                                                                                                 SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   present invention relates to novel methods for constructing fungal
                                                                                Gene identification; essential gene; GRACE; pathogenic fungus; gene replacement and conditional expression; fungal infection; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                    Primer A #1 used as probe for identifying C. albicans GRACE strain.
                                                                                                                                                                                                                                                                                                                                                                                      Identifying genes essential to fungal metabolisms and identifying potential therapeutic agents that target these genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
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8e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 22 BP; 3 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 14.6; DB
Pred. No. 8e+02
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for identifying C. albicans GRACE strains
                                                                                                                                                                                                                                                                                                                               Bussey
                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 301; 324pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGGATGAAGAAGATCAAACGG 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                               Boone C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%;
                                                                                                                                                                                                                                     20-FEB-2001; 2001WO-US005551.
                                                                                                                                                                                                                                                                   18-FEB-2000; 2000US-0183534P
                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                 (ELIT-) ELITRA PHARM INC.
                                                                                                                                                                                                                                                                                                                             T, Jiang B,
                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-489080/53
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les 17; Conserv
                                                                                                                              Candida albicans
                                                                                                                                                                            WO200160975-A2.
                       04-DEC-2001
                                                                                                                                                                                                          23-AUG-2001
                                                                                                                                              Synthetic
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                                                                                                                                                                                                                                                                                                                               Roemer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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useful

isolated nucleic acid with at least one polymorphic position, use detecting, diagnosing and treating disorders such as angioedema, er, viral, bacterial or fungal infection, cardiovascular and

Zerba KE, Ma-Edmonds M, Perrone MH;

Z, Hui L, Powell JR;

TSUCHIHASHI

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polynuclectides are also useful for chromosome identification. Antibodies against the proteins may be utilised for immunophenotyping of cell lines and biological samples. The present sequence is a genotyping PCR primer for the gene encoding one of the proteins listed above, using the method of automated genetic bit analysis, GBA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           artery disease, arteriosclerosis and/or atherosclerosis, and hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory arthritis, cancer, wounds, viral, bacterial or fungal infection, Chron obstructive pulmonary disease (COPD) and enterocolitis (many other diseases and disorders are listed in the specification). The
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Sequence 22 BP; 3 A; 6 C; 9 G; 4 T; 0 U; 0 Other;

polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;

ss; aminopeptidase P; XPNRP2; bradykinin receptor B1; primer; tachvkinin receptor B1; TACR1; Cl esterase inhibitor; ClNH;

Human automated genomic bit analysis (GBA) PCR primer #37.

(first entry)

05-NOV-2002

ABS61060;

CGAATCAAGATGATCAAACAG 2

22

à QQ ABS61060 standard; DNA; 22 BP.

RESULT 679

ABS61060

BDKRB1, tachykinin receptor B1, TACR1, C1 esterase inhibitor, CINH kallikrein 1, KLK1, bradykinin receptor B2; BDKRB2, gene therapy, angiotensin converting enzyme 2, ACE2, protease inhibitor 4; PI4;

cardiovascular disease, angina pectoris, hypertension, heart failure, myocardial infarction, ventricular hypertrophy, vascular disease, aneurysm; embolism; thrombosis, coronary artery disease, angioedaema, arteriosclerosis, atherosclerosis, hypersensitivity; sepsis, PCR,

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ö
                    Gaps
                    0;
Length 22;
                  4; Indels
DB 1;
        8e+02;
        Pred. No. 8e+0
0; Mismatches
 Score 14.6;
        81.0%;
                  17; Conservative
Query Match
Best Local Similarity
                  Matches
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1594 GTGGTGGACACCGAGTTCTAA 1614 1 Gregrescacesarcerca 21 ð

ABZ29860 standard; DNA; 22

ABZ29860;

30-JAN-2003 (first entry)

Candida albicans GRACE strain PCR primer SEQ ID NO 4011.

Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis; signal transduction; DNA replication; cell division; growth; proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.

Candida albicans

WO200253728-A2.

11-JUL-2002

26-DEC-2001; 2001WO-US049486.

29-DEC-2000; 2000US-0259128P. 20-FEB-2001; 2001US-00792024. 22-AUG-2001; 2001US-0314050P.

(ELIT-) ELITRA PHARM INC.

WPI; 2002-566694/60.

Bussey H, Ohlsen KL; Boone C, Roemer T, Jiang B,

Claim 36; SEQ ID NO 4011; 167pp + Sequence Listing; English.

Constructing strains for identifying gene products as effective targets for therapeutic intervention, by inactivating in the strain one allele of a gene and placing other allele of the gene under conditional expression.

The invention relates to constructing (M1) a strain of diploid fungal cells in which both alleles of a gene are modified, comprising modifying one allele by insertion or replacement by a cassette having an expressible selectable marker and modifying other allele by recombination, of a promoter replacement fragment with a heterologous promoter. So that expression of the second allele is regulated by the promoter. (M1) is useful for constructing a strain of diploid fungal cells in which both alleles modified are useful for identifying a gene that cells having both alleles modified are useful for identifying a gene that is essential to the survival or growth of a fungus, a gene that contributes to the virulence and/or pathogenicity of a fungus, a gene that contributes to the resistance of a diploid fungus to an antifungal agent, an antifungal agent that inhibits the growth of a diploid fungus to an antifungal agent, an antifungal agent that inhibits the growth of a diploid fungus compound witch modulates the activity of a gene product, preferably enzymatic activity, carbon compound catabolism, biosynthetic, transporter, transcriptional, compound catabolism, biosynthetic, transporter, transcriptional, compound actabolism, signal transduction, DNA replication and cell division activity. The method is useful for identifying a compound having the ability to inhibit growth or proliferation of c. albicans cells and for treating infection by C. albicans. The present sequence at a for this patent is not represented in the printed specification but is based to neequence information supplied to Derwent by the European Patent Office 

Sequence 22 BP; 3 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

0 Gaps .. 0.8%; Score 14.6; DB 1; Length 22; 11.0%; Pred. No. 8e+02; ve 0; Mismatches 4; Indels 81.0%; 17; Conservative Best Local Similarity Matches 17; Conserv Query Match

CGAATCAAGATGATCAAACAG 2 22

셤

ABN88966

ABN88966 standard; DNA; 22 BP

ABN88966;

(first entry) 22-AUG-2002

Human NOV1 forward PCR primer SEQ ID NO:14.

Human; NOVI; NOVX; endozepine-related protein precursor-like protein, cytostatic; antiarteriosclerotic; antidiabetic; anti-HIV; antiarteriosclerotic; antidiabetic; anti-HIV; antiarthmatic; anti-inflammatory; haemostatic; hypotensive; neuroprotective; anorectic; nootropic; antidepresent; immunosuppreseive; analgesic; cardiant; quatialcoholic; antilipaemic; gene therapy; cancer; Alzheimer's disease; stroke; tuberous sclerosis; Parkinson's disease; hypercalcaemia; Huntington's disease; cerebral palsy; epilepsy; Lesch-Nyhan syndrome; multiple sclerosis; ataxia-telangiectasia; leukodystrophy; addiction; anxiety; depreseion; neurodegenreative disorder; stress; immune disorder; anchesis; obseity; diabetes; haematopoletic disorder; dyslipidaemia; wasting disorder; PCR primer; ss.

Homo sapiens.

WO200234782-A2

02-MAY-2002.

23-OCT-2001; 2001WO-US046005.

23-OCT-2000; 2000US-0242485P. 22-JAN-2001; 2001US-0263339P. 29-JAN-2001; 2001US-0264850P. 29-JAN-2001; 2001US-0264850P. 22-OCT-2001; 2001US-00035568.

(CURA-) CURAGEN CORP.

Ellerman K; Vernat CAM; Gerlach V, Macdougall JR, Millet I, Gunther E, Grosse WM, Alsobrook JP, Lepley DM, Burgess CE, Shenoy S, Spytek KA, Mishra V, Padigaru M; 

WPI; 2002-479708/51.

New NOVX or NOV1 polypeptides and nucleic acids, useful for preventing or treating NOVX-associated disorders e.g. cardiomyopathy, atherosclerosis, cancer, Huntington's disease or Alzheimer's disease.

Example 2; Page 96; 124pp; English.

The present invention describes human NOV1 (an endozepine-related protein precursor-like protein). Human NOV1 maps to human chromosome 10. NOV1 has cytostatic, antiarteriosclerotic, antidiabetic, haemostatic, anti-HIV, antiasthmatic, anti-inflammatory, hypotensive, neuroprotective, anorectic, nootropic, antidepressant, immunosuppressive, tranquilliser, antalgesic, cardiant, gastrointestinal, anticonvilsant, immunoadulator, antialcoholic and antilipaemic activities, and can be used in gene therapy. Novx nucleic acids, polypeptides and antibodies are useful for treating or diagnosing diseases such as cancers, Von Hippel-Lindau syndrome, Alzheimer's disease, stroke, tuberrous sclerosis, Parkinson's disease, hypercalcaemia, Huntington's disease, cerebral palsy, epilepsy, lesch-Nyhan syndrome, multiple sclerosis, ataxia-telangiectasia, pain, leukodystrophies, behavioural disorders, addiction, anxiety, depression,

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JP2002078489-A.
                                                                                                                                                                                                                                                                                                22-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-MAR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                          Bacillus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                expression.
                                                                                                                                                                                                                                                                   AAL43364;
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   drug
                                                                                              Matches
                                                                                                                                                                                                                      AAL43364
                                                                                                                                                                                                       RESULT
   SXS
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XXEXEXEX
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The PCR was used to characterise metabolic enzyme induction by vitamin D analogues, corticosteroids and macrolactams in human skin. The invention provides for the use of antagonists of P450 enzymes for the prevention or alleviation of a tachyphylactic response to administration of a vitamin D analogue, corticosteroid or macrolactam to a patient, e.g. for the reatment of psoriasis. The underlying cause of tachyphylaxis was shown or receptor down-regulation. Exposure of a patient to the drug for extended periods results in an increase in the expression of enzymes which are capable of metabolizing the drug. A method for treatment of tachyphylaxis therefore involves inhibiting the induced metabolic enzyme, especially a P450 cytochrome, by administration of an antagonist of the enzyme. Detection of an increase in the amount and/or activity of a metabolic enzyme capable of metabolizing a drug following extended exposure of a cell from an individual to the drug indicates the increased likelihood of that individual developing a tachyphylactic response to the
                                                                                                                                                                                                       ö
neurodegenerative disorders, stress, immune disorders, alcoholism, obesity, diabetes, haematopoietic disorders, dyslipidaemias, and wasting disorders associated with chronic diseases. The nucleic acids and polypeptides may also be used as targets for the identification of small molecules that modulate or inhibit e.g. neurogenesis, cell proliferation, cell differentiation, haematopoiesis, wound healing and angiogenesis. The present sequence represents a PCR primer for human NOVI, which is used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alleviating or preventing a tachyphylactic response to an agent and treating psoriasis, comprises administering an antagonist of a metabolic enzyme, which is induced as a result of exposure to the agent, to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cytochrome P450; CYP27A1; enzyme; tachyphylaxis; drug tolerance; human; psoriasis; antipsoriatic; antipruritic; dermatological; PCR; primer; ss
                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ward S;
                                                                                                                                                                                                         ..
0
                                                                                                                                                                     Query Match

0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tazi-Ahnini R,
                                                                                                                                           Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytochrome P450 CYP27Al antisense primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cork M, Duff G,
                                                                                                              an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 75; 136pp; English.
                                                                                                                                                                                                                                       886 GGGAACATCATCAACATGCAC 906
                                                                                                                                                                                                                                                                   GGCAAATCATCAACATCAAC 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MOLE-) MOLECULAR SKINCARE LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-2000; 2000GB-00029524.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-DEC-2001; 2001WO-GB005369.
                                                                                                                                                                                                                                                                                                                                               ABQ81301 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bavik C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-713234/77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200245704-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                             12-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-JUN-2002
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                                                                                                                                                                                                                                                                                                                                                                              ABQ81301;
                                                                                                                                                                                                                                                                                                                    RESULT 682
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A new acid protease in which the serine residue participates to activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Acid protease; PCR; primer; ss; digestive enzyme; protein hydrolysis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Acid protease; PCR; primer; ss; digestive enzyme; protein hydrolysis; drug production; food production; enzyme.
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                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·.
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                                                 DB 1; Length 22;
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                                                                                                4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bacillus sp novel acid protease PCR primer D165-S.
Sequence 22 BP; 5 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 22 BP; 5 A; 7 C; 8 G; 2 T; 0 U; 0 Other;
                                              Score 14.6; DB 1
Pred. No. 8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1468 CTGGGGGGGGGTCCACAAA 1488
                                                                                                                                                    864 GAAGCAGTACCTGGATGACTG 884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 4; Page 8; 25pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                   Н
                                                                                                                                                                                                   21 GAAGCGATACCTGGATGGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGGGGCCAGCGGATCCACAGA
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                                                                                                                                                                                                                                                                                                                             BP
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                                                                        81.0%;
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                                                                                                                                                                                                                                                                                                                             AAL43364 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
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                                                                                                  17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
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                                              Query Match
Best Local Similarity
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Alsobrook JP, Lepley DM, Reiger DK, Spytek KA, Boldog FL, Li L, Padigaru M; Shenoy SK, Rastelli L, Tchernev VT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Macdougall JR, Millet I, Ellerman K,
Grosse WM, Alsobrook JP, Lepley DM, F
Casman SJ, Spytek KA, Boldog FL, Li I
                                                                                                                                                                                                                                                                                                                                                                                                                   AAL43762 standard; DNA; 22
                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 81.0%
                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
 Patturajan M,
Zerhusen BD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patturajan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CURA-) CURAGEN CORP.
                                         WPI; 2002-527702/56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200244211-A2
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20-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Edinger SR,
Gerlach VL,
Burgess CE,
Mishra V, Pa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-NOV-2000;
                  Gangolli EA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-JUN-2002
           CAM,
                                                                                             disorders.
Mishra V,
Vernet CA
                                                                                                                                                                                                                                                                                                                                                                                                                                        AAL43762;
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                                                                                                                                                                                                                                                                                                                                                                                              RESULT 686
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                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                     The invention comprises the amino acid and coding sequences of two novel Bacillus sp acid proteases. The novel acid proteases of the invention are useful as digestive enzymes for the hydrolysis of proteins in drugs and foods. The present DNA sequence represents a PCR primer that is specific for the gene sequence of a Bacillus sp acid protease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; PCR; primer, ss; gene therapy; vaccine; NOV2; NOVOX; cancer; neurodegenerative disorder; immune disorder; haematopoietic disorder; dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain; Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy; tuberous sclerosis; hypercalcaemia; Parkinson's disease; epilepsy; Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;
                                                                                                                                                                    A new acid protease in which the serine residue participates to activity
                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JR, Millet I, Ellerman K, Stone DJ;
Alsobrook JP, Lepley DM, Reiger DK;
Spytek KA, Boldog FL, Li L, Padigaru M;
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0
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                                                                                                                                                                                                                                                                                                                               4; Indels
                                                                                                                                                                                                                                                                                      Sequence 22 BP; 1 A; 9 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                     Pred. No. 8e+02;
                                                                                                                                                                                                                                                                                                                               0; Mismatches
 food production; enzyme.
                                                                                                                                                                                                                                                                                                          0.8%; Score 14.6;
81.0%; Pred. No. 8e
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                                                                                                                                                                                                                                                                                                                                                    1466 GTCTGGGGGGGGGATCCACA 1486
                                                                                                                                                                                                    Example 4; Page 8; 25pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                        GCCGGGGCCAGCGGATCCACA 2
                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                  04-SEP-2000; 2000JP-00267840.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0253834P.
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                                                                                                      04-SEP-2000; 2000JP-00267840.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            depression; stress; diabetes
                                                                                                                                                                                                                                                                                                                                                                                                                             AAL43783 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                Conservative
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Grosse WM,
Casman SJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CURA-) CURAGEN CORP.
                                                                                                                          (DAIW ) DAIWA KASEI
                                                                                                                                               WPI; 2002-430301/46
                                                                                                                                                                                                                                                                                                                     Local Similarity
 drug production;
                                         JP2002078489-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200244211-A2
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                                                                                                                                                                                                                                                                                                                              17;
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Gerlach VL,
Burgess CE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-SEP-2002
                   Bacillus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-JUN-2002
                                                             19-MAR-2002
                                                                                                                                                                              expression.
                                                                                                                                                                                                                                                                                                          Query Match
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or
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diabetes. The present DNA sequence represents a NOV2 gene PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; PCR; primer; ss; gene therapy; vaccine; NOV1; NOVOX; cancer; neurodegenerative disorder; immune disorder; haematopoietic disorder; dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain; Von Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy; tuberous sclerosis; hypercalcaemia; Parkinson's disease; epilepsy; Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia; depression; stress; diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention comprises the amino acid and coding sequences of human NOVOX (NOV1 and NOV2) proteins. The NOVOX proteins of the invention are useful for identifying an agent (a cellular receptor or downstream effector) that binds to a NOVOX protein. The NOVOX DNA and protein sequences of the invention are useful for the treatment (gene therapy) opervention (vaccine) of: cancer; neurodegenerative disorders; immune disorders; haematopoietic disorders; dyslipidaemia, obesity; metabolic syndrome X; wasting disorders; von Hippel-Lindau (VHL) syndrome;
                                                                                                                                                                                                                                                                                                disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                polypeptides, useful for treating cancers, neurodegenerative disoimmune disorders, hematopoietic disorders, diabetes and metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alzheimer's disease; stroke; tuberous sclerosis; hypercalcaemia;
Parkinson's disease; Huntington's disease; cerebral palsy; epile
        Ψ;
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                                                                                                                                                                                                                                                         Novel cytoplasmic, nuclear, membrane bound and secreted NOVX
            Tchernev
                                           Miller CE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%; Score 14.6; DB 1; Length 22;
81.0%; Pred. No. 8e+02;
ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
Shenoy SK, Rastelli L,
Malyankar UM, Guo X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human NOV1 gene PCR primer: SEQ ID NO 18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 3; Page 130; 155pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       886 GGGAACATCATCAACATGCAC 906
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-0253834P.
2001US-0264180P.
2001US-0313656P.
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Stone DJ; Reiger DK;

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Human; PCR; primer; ss; gene therapy; vaccine; NOV2; NOVOX; cancer; neurodegenerative disorder; immune disorder; haematopoietic disorder; dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain; ton Hippel-Lindau syndrome; Alzheimer's disease; stroke; cerebral palsy; tuberous sclerosis; hypercalcaemia; Parkinson's disease; epilepsy; Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia; depression; stress; diabetes.
                                                                                                                                                                                                  The invention comprises the amino acid and coding sequences of human NOVOX (NOV1 and NOV2) proteins. The NOVOX proteins of the invention are useful for identifying an agent (a cellular receptor or downstream effector) that binds to a NOVOX protein. The NOVOX DNA and protein sequences of the invention are useful for the treatment (gene therapy) opervention (vaccine) of: cancer; neurodegenerative disorders; immune disorders; haematopoietic disorders; neurodegenerative obesity; metabolic syndrome X; wasting disorders; von Hippel-Lindau (VHL) syndrome; Alzheimer's disease; stroke; tuberous sclerosis; hypercalcaemia; Parkinson's disease; tuberous sclerosis; hypercalcaemia; Parkinson's disease; tubercalcaemia; stackie-telangiectasia; pain; depression; stress disbetes. The present DNA sequence represents a NOVI gene PCR primer
                                                                     Novel cytoplasmic, nuclear, membrane bound and secreted NOVX polypeptides, useful for treating cancers, neurodegenerative disorders, immune disorders, hematopoietic disorders, diabetes and metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Edinger SR, Macdougall JR, Millet I, Ellerman K, Stone DJ; Gerlach VL, Grosse WM, Alsobrook JP, Lepley DM, Reiger DK; Burgess CE, Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M; Mishra V, Patturajan M, Shenoy SK, Rastelli L, Tchernev VT; Vernet CAM, Zerhusen BD, Malyankar UM, Guo X, Miller CE; Gangolli EA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.6; DB 1; Length 22; 81.0%; Pred. No. 8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human NOV2 gene PCR primer: SEQ ID NO 51.
                                                                                                                                                                      Example 3; Page 111; 155pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            886 GGGAACATCATCAACATGCAC 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCAAATCATCAACATCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-NOV-2000; 2000US-0253834P.
25-JAN-2001; 2001US-0264180P.
20-AUG-2001; 2001US-0313656P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-NOV-2001; 2001WO-US048842.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAL43795 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                     WPI; 2002-527702/56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200244211-A2.
                                                                                                 polypeptides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-JUN-2002
                                                                                                                                     disorders
Gangolli
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                           Novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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                                                                                                                                                                                                                          The invention comprises the amino acid and coding sequences of human NOVOX (NOV1 and NOV2) proteins. The NOVOX proteins of the invention are useful for identifying an agent (a cellular receptor or downstream effector) that binds to a NOVOX protein. The NOVOX DNA and protein sequences of the invention are useful for the treatment (gene therapy) or prevention (vaccine) of: cancer, ineurodegenerative disorders; immune disorders; haematopoietic disorders; dyslipidaemia; obesity; metabolic syndrome X; wasting disorders; Von Hippel-Lindau (VHL) syndrome;
                                                                                                                                                                                                                                                                                                                                                                                 Aîzheimer's disease; stroke; tuberous sclerosis; hypercaicaemia; Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy; lesch-Nyhan syndrome; ataxia-telandectasia; pain; depression; stress and diabetes. The present DNA sequence represents a NOV1 gene PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; PCR; primer; ss; gene therapy; vaccine; NOVI; NOVOX; cancer; neurodegenerative disorder; immune disorder; haematopoietic disorder; dyslipidaemia; obesity; metabolic syndrome X; wasting disorder; pain; Von Hippel-Lindau syndrome; Alzheimer's disease; trroke; cerebral palsy; tuberous sclerosis; hypercalcaemia; Parkinson's disease; epilepsy; Huntington's disease; Lesch-Nyhan syndrome; ataxia-telangiectasia;
                                                                                                               neurodegenerative disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Macdougall JR, Millet I, Ellerman K, Stone DJ;
Grosse WM, Alsobrook JP, Lepley DM, Reiger DK;
Casman SJ, Spytek KA, Boldog FL, Li L, Padigaru M;
Atturajan M, Shenoy SK, Rastelli L, Tchernev VT;
Zerhusen BD, Malyankar UM, Guo X, Miller CE;
                                                                                                               polypeptides, useful for treating cancers, neurodegenerative disorimmune disorders, hematopoietic disorders, diabetes and metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                               membrane bound and secreted NOVX
 Miller CE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.6; DB 1; Length 22; 31.0%; Pred. No. 8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
 Guo X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human NOV1 gene PCR primer: SEQ ID NO 33.
 Malyankar UM,
                                                                                                                                                                                            Example 3; Page 110; 155pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               886 GGGAACATCATCAACATGCAC 906
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25-JAN-2001; 2001US-0264180P.
20-AUG-2001; 2001US-0313656P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Huntington's disease; Lesch-N
depression; stress; diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-NOV-2001; 2001WO-US048842.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81.0%;
                                                                                                 nuclear,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAL43777 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            , Casman SJ, Sp
Patturajan M, S
, Zerhusen BD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
 Zerhusen BD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17; Conservative
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                                                           WPI; 2002-527702/56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                   cytoplasmic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200244211-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Edinger SR,
Gerlach VL,
Burgess CE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mishra V, F
Vernet CAM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-SEP-2002
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                     Gangolli EA
                                                                                                                                                        disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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Gaps

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The invention comprises the amino acid and coding sequences of human NOVOX (NOV1 and NOV2) proteins. The NOVOX proteins of the invention are useful for identifying an agent (a cellular receptor or domstream effector) that binds to a NOVOX protein. The NOVOX DNA and protein sequences of the invention are useful for the treatment (gene therapy) or prevention (vaccine) of: cancer; neurodegenerative disorders; immune disorders; haematopoietic disorders; you Hippel Lindau (VHL) syndrome; Alzheimer's disease; stroke; tuberous sclerosis; hypercalcaemia; Parkinson's disease; Huntington's disease; cerebral palsy; epilepsy; Lesch-Nyhan syndrome; ataxia-telangiacicasis; cerebral palsy; epilepsy; Lesch-Nyhan syndrome; ataxia-telangiacicasis; paln; depression; stress and diabetes. The present DNA sequence represents a NOV2 gene PCR primer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NOVX; autoimmune disease; allergy; Alzheimer's disease; stroke; Parkinson's disease; Huntington's disease; multiple sclerosis; addiction; anxiety; pain; diabetes; glomerulonephritis; obesity; systemic lupus erythematosus; asthma; scleroderma; pancreatitis; graft versus host disease; ulcer; anaemia; cancer; trauma; infection; cardiomyopathy; atherosclerosis; hypertension; AlDS; Crohn's disease; acquired immunodeficiency syndarome; chromosomal mapping; tissue typing; forensic biology; predictive medicine; gene therapy; human; PCR; primer;
                                                              polypeptides, useful for treating cancers, neurodegenerative disorders, immune disorders, hematopoietic disorders, diabetes and metabolic disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                     cytoplasmic, nuclear, membrane bound and secreted NOVX
                                                                                                                                                                                                                                                                                                                                                                                                                                         0.8%; Score 14.6; DB 1; Length 22;
81.0%; Pred. No. 8e+02;
Live 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel human protein associated PCR primer #6.
                                                                                                                                         Example 3; Page 130; 155pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               886 GGGAACATCATCAACATGCAC 906
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2001US-0296418P
2001US-029675P
2001US-0297414P
2001US-0297567P
2001US-02958P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001US-0295661P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001US-0299230P.
2001US-0299949P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACD13238 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-AUG-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 81.0
nes 17; Conservative
                  WPI; 2002-527702/56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200298900-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-JUN-2001;
12-JUN-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-JUN-2001;
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                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                     Novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 689
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The invention describes an isolated NOVX polypeptide (I) comprising a sequence selected from a sequence (S1) of 1121, 635, 299, 1720, 176, 583, C2 214, 395, 1098, 134, 427, 1333, 407, 806, 804, 1253, 382, 1045, 284, 496, 265, 759, 390, 133, 215, 240, 1069, 116, 499, 1138, 477, 316, 269, 219, 205, 406, 460, 365, 380, 829 or 326 amino acids fully defined in the specification, and the mature form of S1. (I) is useful for treating or preventing a pathology associated with (I) in a subject, preferably thuman, or for identifying an agent that binds to (I), where the agent is compared to a cellular receptor or a downstream effector. (I), a polynucleotide (II) encoding (I) or an anti-(I)-antibody (V) is useful treating or preventing disorders or syndromes such as autoimmune disease, allergies, Alzheimer's colerosis, addiction, anxiety, pain, diabetes, glomenulonephritis, colerosis, addiction, anxiety, pain, diabetes, glomenulonephritis, systemic lupus erythematosus, asthma, scleroderma, graft versus host disease, pancreatitis, obesity, ulcers, anaemia, cancer, trauma, viral, colsease, colformine and parasitic infections, cardiomyopathy, atherosclerosis, disease. (I), (II) or (V) is useful in screening assays, comitoring clinical contribute (e.g., diagnostic assays, prognostic assays, monitoring clinical contributed pharmacogenomic), and in methods of treatment (e.g., diagnostic assays, prognostic assays, monitoring clinical contributes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NOVX activity. This sequence represents a primer used to isolate
                                                                                                                                                                                                                                                                                                                                                                                                               Novel isolated NOVX polypeptide useful treating or preventing disorders or syndromes such as autoimmune disease, allergies, Alzheimer's disease, stroke, Parkinson's disease, Huntington's disease or multiple sclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; NOVX; PCR; ss; metabolic disorder; cardiomyopathy; diabetes; ASD;
                                                                                                                                                                                                                                                                Miller CE, Hjalt T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                              Kekuda R, Spytek KA, Shenoy SG, Miller CE, Hjalt 1
Baumgartner JC, Guo X, Gangolli EA, Vernet CAM;
Li L, Pena CEA, Gorman L, Anderson DW, Edinger SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (I), to detect NOVX mRNA or a genetic lesion in a NOVX gene, and modulate NOVX activity. This semience reconstruction
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11.0%; Pred. No. 8e+02;
ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 22 BP; 5 A; 6 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA encoding a novel human NOV protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 39; Page 241; 408pp; English.
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22-JUN-2001; 2001US-0300177P.
26-JUN-2001; 2001US-0300883P.
28-JUN-2001; 2001US-0301530P.
28-JUN-2001; 2001US-0301550P.
03-JUL-2001; 2001US-0302951P.
12-SEP-2001; 2001US-0318727P.
27-SEP-2001; 2001US-0318685P.
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                                                                                                                                                         2002US-0358814P
                                                                                                                                                                           03-JUN-2002; 2002US-00161927
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                                                                                                                                                                                                                                                                                                           Padigaru M, Li L, Pen
Patturajan M, Stone DJ
                                                                                                                                                                                                                      (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-140585/13
                                                                                                                                                                                                                                                            Zerhusen BD,
                                                                                                                                                         22-FEB-2002;
                                                                                                                                                                                                                                                                                      Gerlach VL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-JUN-2003
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      AXEXEXEX
AXEXEXEX
BX
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(CURA-) CURAGEN CORP. WO200281498-A2 Patturajan M, 10-APR-2001; 12-APR-2001; 13-APR-2001; -APR-2001; -APR-2001; 02-APR-2002; 7-APR-2001; 24-APR-2001; 25-APR-2001; 27-APR-2001; 29-MAY-2001; 30-MAY-2001; 19-JUN-2001; 27-SEP-2001; 17-OCT-2001; 14-NOV-2001; 21-NOV-2001; Homo sapiens APR-2001; -APR-2001; 20-APR-2001; 20-APR-2001; 02-MAY-2001; 18-JUN-2001; 19-JUN-2001; 12-SEP-2001; 25-SEP-2001; SEP-2001; 03-JAN-2002; 16-JAN-2002; Ellerman K; 17-0CT-2002 04-DEC-2001 Guo X, 

hypertension; congenital heart defect; aortic stenosis; valve disease; atrial septal defect; atrioventricular canal defect; ductus arteriosus; pulmonary stenosis; subaortic stenosis; ventricular septal defect; VSD; tuberous sclerosis; scleroderma; atherosoclerosis; infectious disease; obesity; anorexia; neurodegenerative disorder; Alzheimer's disease; Parkinson's disease; immune disorder; haematopoietic disorder; primer; haemophilia; hypercoagulation; Crohn's disease; cancer. 2001US-0285609P. 2001US-0285748P. 2001US-0285890P. 2001US-0286068P. 2001US-028622P. 2001US-0288257P 2001US-0294164P 2001US-029464P 2001US-0299237P 2001US-0299276P 2001US-0318750P 2001US-0318750P 2001US-0318750P 2001US-032480P 2001US-032480P 2001US-032480P 2001US-0282020P. 2001US-0282930P. 2001US-0282934P. 2001US-0283512P. 2001US-0283710P. 2001US-0284234P. 2001US-0285325P. 2001US-0285381P. 2001US-0281136P. 2001US-0281863P. 2001US-0281906P. 2001US-0332240P 2001US-0332779P 03-APR-2002; 2002WO-US010780 2001US-0332115P 2001US-0337621P 2002US-0350251P

Kekuda R, Miller CE, Malyankar UM, Spytek KA;
jan M, Liu X, Gusev VY, Li L, Vernet CAM, Zerhusen BD;
L, Shenoy SG, Pena CEA, Smithson G, Burgess CE, Gerlach V;
U M, Shimkets RA, Gapolli EA, Taupier RJ, Casman SJ, Ji W;
DW, Leite MW, Rastelli L, Edinger SR, Stone DJ;
all JR, Rothenberg ME, Mazur A, Millet I, Peyman JA; Gorman Ľ, Shenoy Padigaru M, Shir Anderson DW, Le: Macdougall JR, I

WPI; 2003-046858/04.

New isolated NOVX polypeptide useful for treating atherosclerosis, metabolic disorders, diabetes, obesity, infectious disease, anorexia, neurodegenerative disorders, Alzheimer's disease and cancer.

Example 83; Page 368; 666pp; English.

The invention relates to human polypeptides, termed NOVX, and the

Sequence 22 BP; 8 A; 4 C; 8 G; 2 T; 0 U; 0 Other;

ó polymucleotides encoding them. The polypeptides and polymucleotides are useful for diagnosing disease, and screening for potential therapeutic agents. The sequences are useful for treating metabolic disorders, cardiomyopathy, diabetes, hypertension, congenital heart defects, aortic stenosis, atrial septal defect (ASD), atrioventricular canal defect, ductus arteriosus, pulmonary stenosis, subsortic stenosis, ventricular septal defect (VSD), valve diseases, tuberous sclerosis, scleroderma, atherosclerosis, obesity, infectious disease, anorexia, neurodegenerative disorders, Alzheimer's disease, Parkinson's disease, immune disorders, haemacopoietic disorders, haemophilia, hypercoagulation, Crohn's disease and cancer. This sequence represents a PCR primer used to amplify a human NOVX polynucleotide of the invention New histone deacetylase 9 polypeptide, useful for screening for candidate compounds that share a, bind to, or inhibits the histone deacetylase 9 biological activity, and for diagnosing or prognosing cancer, e.g. The invention relates to an isolated polypeptide having histone deacetylase (HDAC) activity. Polypeptides and nucleic acids of the invention are useful for screening for candidate compounds that share, bind to, or inhibit histone deacetylase 9 (HDAC9) biological activity, and for diagnosing or prognosing cancer, e.g. leukaemia such as TEL-AML1 positive and negative pre-B cell acute lymphoblastic leukemia or B cell lymphoma. The current sequence the human HDAC9 exon 4 alternative 5' Gaps Human HDAC9 exon 4 alternative 5' splice donor consensus sequence. Human; HDAC9; histone deacetylase 9; enzyme; cytostatic; cancer; ô 0.8%; Score 14.6; DB 1; Length 22; 31.0%; Pred. No. 8e+02; 4; Indels Seguence 22 BP; 9 A; 4 C; 5 G; 4 T; 0 U; 0 Other; 0; Mismatches Disclosure; Page 44; 71pp; English. TGGGAAACTGGAGACCTACAT 620 raccadadarccaccinacar 22 splice donor consensus sequence Ē BP. 02-OCT-2001; 2001GB-00023664. 02-OCT-2002; 2002WO-GB004455. Guidez 81.0%; ACC80005 standard; DNA; 22 (first entry) 17; Conservative (CANC-) CANCER RES INST. (ZELE/) ZELENT A. (PETR/) PETRIE K. (GUID/) GUIDEZ F. Petrie K, WPI; 2003-381634/36. Best Local Similarity WO2003029451-A2. leukaemia; ds. Homo sapiens. 25-JUL-2003 10-APR-2003. Zelent A, 009 ACC80005; Query Match 691 Matches ACC80005 255555555555555 셤 ઠે

0;

Gaps

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Indels

4 ;

Mismatches

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17; Conservative

Matches

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Query Match 0.8*; Score 14.6; DB 1; Length 22; Best Local Similarity 81.0*; Pred. No. 8e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New nucleic acid molecule for diagnostic and therapeutic applications and as a marker or a modulator of developmental or pathogenic processes, e.g. cancer, comprises microRNAs of a Drosophila melanogaster, a human or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence represents an miRNA
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                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Drosophila melanogaster; human; mouse; microRNA; miRNA; cytostatic; gene therapy; diagnostic; therapeutic; developmental modulator; pathogenic modulator; cancer; B-cell chronic leukaemia;
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       DB 1; Length 22;
                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mouse and human miRNA sequence miR-C30 SEQ ID NO:213.
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0.8%; Score 14.6; DB 1
81.0%; Pred. No. 8e+02;
tive 0; Mismatches
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                                                                                                                                                 2 GGAAGCAGCGTAAAGGATGGA 22
                                                                                                                                                                                                                  2 GGCACCAGGGTAAACGATGGA 22
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                                                                                                                                                                                                                                                                                                                                                                                                         ADA00216 standard; RNA; 22 BP
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22-MAR-2002; 2002EP-0006712.
26-JUL-2002; 2002EP-00016772.
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                                      Best Local Similarity 81.0
Matches 17; Conservative
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       Query Match
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Malyankar UM;
hs C, Gerlach V;
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                                                                                                                                                                                                                                                                                                   Huntington's disease, cerebral palsy, Lesch-Nyhan syndrome; pain; multiple sclerosis; ataxia-telangiettasia; leukodystrophy, anxiety; multiple sclerosis; ataxia-telangiettasia; leukodystrophy, anxiety; renal artery stenosis; interstitial nephrittis; glomerulonephritis; polycystic kidney disease; systemic lupus erythematosus; IgA; primer; renal tubular acidosis; immunoglobulin A nephropathy; hypercalcaemia; cirrhosis; transplantation, asthma; emphysema; scleroderma; GVHD; adult respiratory distress syndrome; graft versus host disease; Ilymphedema; fertility; pancreatitis; obesity; haemophilia; ulcer; real-time quantitative PCR.
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                                                                                                                                                                                                RTQ-PCR primer #1 for human protein NOV27.
1482 CCACAAACTTCCTGACACTAC 1502
                            22 ccacacacriccriacaricc
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2001US-0283512P.
2001US-0285325P.
2001US-0285890P.
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2001US-0286292P.
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2001US-0291134P.
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2001US-0305063P.
2001US-0332780P.
                                                                                                     ABX17615 standard; DNA; 22 BP
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03-APR-2001; 2001US-0281136F.
05-APR-2001; 2001US-0281966F.
05-APR-2001; 2001US-0282020P.
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                                                                                                                                                                  (first entry)
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19-APR-2001;
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Gangolli EA;
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                                                                                                                                    ABX17615;
                                                                       RESULT 693
                                                                                         ABX17615
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C disease associated with altered levels of NOVX in a first mammalian subject, identifying a potential therapeutic agent for use in the cureatment of pathology related to aberrant expression of physiological interactions of NOVX, screening for a modulator of activity or of latency or predisposition to a pathology associated with NOVX, the nucleic acid encoding NOVX, vectors and host cells. NOVX is useful for identifying an ecoding NOVX nucleic acids are useful for treating or preventing NOVX.

NOVX and NOVX nucleic acids are useful for treating or preventing NOVX.

C NOVX and NOVX congenital adenal hyperplasia, haemophilia, derintering a NOVX related disease human disease of a medicament of a drencleukodystrophy, congenital adrenal hyperplasia, haemophilia, hypercoagulation, idiopathic thrombocytopaenic purpura, autoimmune disease, allergies, immunodeficiencies, transplantation, Von Hippellindau (VHL) syndrome, Alzheimer's disease, tuburous sclerosis, estaches, tuburous sclerosis, estaches, buntington's disease, adlessae, cerebral palsy, epilepsy, lesch-Nyhan syndrome, Malzheimer's disease, adlessae, cerebral palsy, epilepsy, lesch-Nyhan syndrome, multiple sclerosis, ataxia-telangiectasia, neuroprotection, diabetes, renal artery stenosis, immunoglobulin (Ig) A nephropathy, hypercalcaemia, cirrhosis, transplantation, asthma, emphysema, cyphercalcaemia, cirrhosis, transplantation, asthma, emphysema, chost disease (GVHD), lymphedema, fertility, pancreatitis, obesity, haemophilia, ulcers, anaemia, cancer, trauma, regeneration, and viral, haemophilia, ulcers, anaemia, cancer, trauma, regeneration, and viral, haemophilia, ulcers, anaemia, cancer, trauma, regeneration, and viral, chaemophilia, ulcers, anaemia, cancer, trauma, regeneration, and viral, chaemophilia, ulcers, anaemia, cancer, trauma, regeneration, and viral, chaemophilia, ulcers, pancer, trauma, regeneration, and viral, chaemophilia, ulcers, anaemia, cancer, trauma, regeneration, and viral, chaemophilia, ulcers, renal archer sequence are sequence as a rea
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                                                                                                                                                                                                                                invention relates to an isolated NOVX polypeptide selected from NOV1-
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phenylketonuria; haemophilia; alphal-anti trypsin deficiency;
cystic fibrosis; cancer; plant; animal breeding; PCR; primer; P1; human;
apolipoprotein E; ApoE; ss.
                                                                                                                                                                                                                                                        NOV27 polypeptides, a mature form of NOVX_a variant of NOVX or a fragment of NOVX. Also included are determining the presence or amount NOVX in a sample (by using an antibody that immunospecifically bind to the polypeptide), determining the presence of or predisposition to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                              hemophilia, idiopathic thrombocytopenic purpura, autoimmune disease, allergies, transplantation, Alzheimer's disease and stroke.
                                                                         New polypeptides, designated NOVX polypeptides, useful for treating
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; Mismatches 4; Indels
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                                                                                                                                                                               Example C; Page 298; 320pp; English.
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                     WPI; 2003-046863/04
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Best Local Similarity
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mixture octaining the detection primer using a polymerising agent in a mixture containing the detection primer using a polymerising agent in a mixture containing one or more nucleoside triphosphates (WTPB) and detecting the incorporation of the NTP. The method of the invention may be useful for identifying specific point mutations and genetic variations, such as those associated with sickle cell anaemia, beta- and alpha-thalassaemia, phenylketonuria, haemophilia, alphal-anti trypsin deficiency and cystic fibrosis. Specifically, the method may be used for pre- or postnatal disgnosis of hareditary predispositions or diseases, for the detection of somatic mutations in cancer, for the selection of cells and strains for industrial biotechnology and for plant and animal breeding. The method comprises few and easily performed procedures, thus is especially suited for routine determinations of point mutations and nucleotide variations and allows the quantification of the proportion of mutated cells in a sample as well as the identification of mutations mutated cells in a sample as well as the identification of mutations corpuses that of the PCR Primer P1 of the invention which was used to amplify human apolipoprotein E (ApoE) DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; ss; PCR; NOVX; endozepine-like protein; metabolic disorder; diabetes; obesity; infectious disease; anorexia; cancer; cardiovascular disease, hypertension; atherosclerosis; neurodegenerative disorder; Alzheimer's disease; Parkinson's disease; epilepsy; immune disorder; alzheimer's disease; haematopoietic disorder; inflammatory skin disorder; asthem; dyslipidaemia; neurogenesis; cell differentiation; cell proliferation; haematopoiesis; wound healing; angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.
                                                                                                                                                                                                                                                                                          Detecting a specific nucleotide variation at a defined site in a target nucleic acid polymer, useful for pre- or postnatal diagnosis of diseases, comprises extending the detection primer using labeled nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        nucleotide variation at a defined site in a target nucleic acid polymer, where a second nucleotide residue,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention relates to a novel method for detecting a specific
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%; Score 14.6; DB 1; Length 22; 31.0%; Pred. No. 8e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 5; 16pp; English.
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                                                        90US-00482005.
91US-00656575.
93US-00162376.
               95US-00465322
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tes 17; Conservative
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                                                                                                                                                                                                             Soderlund HE, Syvanen A;
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                                                                                                                                                SODERLUND H
                                                                                                                                                                  (SYVA/) SYVANEN A.
                                                                                                                                                                                                                                                                                                                                                                  triphosphates.
                  05-JUN-1995;
                                                        16-FEB-1990;
15-FEB-1991;
                                                                                                     02-DEC-1993;
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                                                                                                                                              (SODE/)
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Homo sapiens

US2003082530-A1

01-MAY-2003

US2003195149-A1. 

The invention relates to an isolated NOVX polypeptide comprising 3 NOV1

Directin variants (NOVI2, NOVIC and NOVId) and NOV2 (appearing as

ADD721120 and ADD72123, all being endozepine-like proteins); a

mature form of NOVX; or a sequence that is at least 95% identical to, or

mature form of NOVX; or a sequence that is at least 95% identical to, or

control one or more conservative amino acid substitutions in, the NOVX

proteins. Also included are a composition comprising NOVX and carrier,

methods for determining the presence of or predisposition to a disease.

CC methods for determining the presence of or predisposition a disease.

CC method in a first mammalian subject, a method of identifying an agent

CC molecule in a first mammalian subject, a method of identifying an agent

CC molecule in a first mammalian subject, a method for screening for a

method of or treating or interactions of NOVX, a method for screening for a

conditation of activity or of latency or predisposition to a pathology

casociated with NOVX, a method for modulating the activity of NOVX, a

method for treating or preventing a pathology associated with NOVX, a

method for treating or preventing a pathology associated with NOVX, a

cc method for treating or preventing a pathology associated with NOVX, a

method for treating or disconsitual state in a mammal, an isolated nucleic

cc comprising the nucleic acid molecule, a cell comprising the vector, an

antibody that binds immunospecifically to NOVX and method for producing

NOVX. The polypeptides, nucleic acid molecules and antibodies are useful

cc in the manufacture of a medicament for treating a syndrome associated

with a human disease, preferably a NOVX associated disorder. The nucleic

cc acid molecules, polypeptides and antibodies are useful for treating,

protezeal), anorexia, cancer, cardiovascular diseases (hyperices,

cc acid molecules, polypeptides and antibodies are useful for treating,

protezeal), anorexia, cancer, cardiovascular diseases (hyperices,

cc and anorexia, can further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The present sequence represents an RTQ (real time quantitative) PCR primer used to assay New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, for use in therapeutic or diagnostic methods. The nucleic acids are tissue/cell specific expression of NOVX. Example 4; SEQ ID NO 18; 89pp; English. 29-NOV-2001; 2001US-00997594. 2000US-0253834P. 25-JAN-2001; 2001US-0264180P. 20-AUG-2001; 2001US-0313656P. Stone DJ; asthma, or infections (GANG/) GANGOLLI E A. WPI; 2003-844478/78. (STON/) STONE D J. Gangolli EA, 29-NOV-2000; 16-OCT-2003.

Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.8%; Best Local Similarity 81.0%;

Score 14.6; DB 1; Length 22; Pred. No. 8e+02; 0; Mismatches 4; Indels 886 GGGACATCATCAACATGCAC 906 0 Conservative 17;

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Gaps

· 0

22 2 GGCAAATCATCAACATCAAC

RESULT

ADD72152 standard; DNA; 22 BP

ADD72152;

(first entry) 29-JAN-2004 Human NOV2 RTQ PCR set Ag1865 primer #1.

Human; ss; PCR; NOVX; endozepine-like protein; metabolic disorder; diabetes; obesity; infectious disease; anorexia; cancer; cardiovascular disease; hypertension; atherosclerosis; neurodegenerative disorder; Alzheimer's disease; Parkinson's disease; epilepsy; immune disorder; osteoarthritis; haematopoietic disorder; inflammaria; neurogenesis; cell differentiation; cell proliferation; hematopoiesis; wound healing; anglogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.

Homo sapiens.

US2003195149-A1.

16-OCT-2003.

29-NOV-2001; 2001US-00997594.

29-NOV-2000; 2000US-0253834P.

25-JAN-2001; 2001US-0264180P. 20-AUG-2001; 2001US-0313656P.

(GANG/) GANGOLLI E A. (STON/) STONE D J.

Gangolli EA, Stone DJ;

WPI; 2003-844478/78.

New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.

Example 4; SEQ ID NO 39; 89pp; English.

The invention relates to an isolated NOVX polypeptide comprising 3 NOV1 protein variants (NOV1a, NOV1c and NOV1d) and NOV2 (appearing as abD72118, ADD72120 and ADD72123, all being endozepine-like proteins); a mature form of NOVX; or a sequence that is at least 95% identical to, or having one or more conservative amino acid substitutions in, the NOVX or proteins. Also included are a composition comprising NOVX and a carrier, methods for determining the presence of or predisposition to a disease associated with altered levels of expression of NOVX or NOVX nucleic acid molecule in a first mammalian subject, a method of identifying an agent that binds to NOVX, a method for identifying a potential therapeutic agent for use in the treatment of a pathology which is related to aberrant expression or interactions of NOVX, a method for screening for a modulator of activity or of latency or predisposition to a pathology associated with NOVX, a method for method for treating a pathological state in a mammal, an isolated nucleic acid molecule encoding NOVX (including their variants), a vector antiposity and a mithody that binds immunospecifically to NOVX and a mithody that binds immunospecifically to NOVX and a mithody or predisposition or predisposition and antibody and a mathod for predisposition and antibody that binds immunospecifically to NOVX and a mithod for predisposition and antibody that binds immunospecifically to NOVX and a mithod for predisposition and antibody that binds immunospecifically to NOVX and a mithod for predisposition and antibody that binds immunospecifically to NOVX and a mithod for predisposition and antibody and an ample of predisposition and antibod NOVX. The polypeptides, nucleic acid molecules and antibodies are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such metabolic disorders, diabetes, obesity, infectious diseases (viral, bacterial, fungal, helminthic, and

Matches

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US2003195149-A1
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protozoal), anorexia, cancer, cardiovascular diseases (hypertension, atherosclerosis), neurodegenerative disorders, Alzheimer's disease, Parkinson's disease, epilepsy, immune disorders losteoarthritis), haematopoietic disorders, inflammatory skin disorders, asthma, and various dyslipidaemias. The nucleic acids and polypeptides may also be used as targets for the identification of small molecules that modulate or inhibit e.g. neurogenesis, call differentiation, cell proliferation, haematopoiesis, wound healing and angiogenesis, in gene therapy, in generation of antibodies that bind immunospecifically to NOVX substances for use in therapeutic or diagnostic methods. The nucleic acids are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diabetes; obesity; infectious disease, anorexia; cancer; cardiovascular disease; hypertension; atherosclerosis; neurodegenerative disorder; Alzheimer's disease; Parkinson's disease; epilepsy; immune disorder; osteoarthritis; haematopoietic disorder; inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis; cell differentiation; cell proliferation; haematopoiesis; wound healing; angiogenesis; gene therapy; primer; RTQ-PCR; real time quantitative PCR.
                                                                                                                                      further used as hybridisation probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The present sequence represents an RTQ (real time quantitative) PCR primer used to assay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an isolated NOVX polypeptide comprising 3 NOV1 protein variants (NOVIa, NOV1c and NOV1d) and NOV2 (appearing as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ss; PCR; NOVX; endozepine-like protein; metabolic disorder;
                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                              5; DB 1; Length 22;
8e+02;
                                                                                                                                                                                                                                                       4; Indels
                                                                                                                                                                                                     Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                              Score 14.6; DB
Pred. No. 8e+02
0; Mismatches
                                                                                                                                                                            tissue/cell specific expression of NOVX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human NOV2 RTQ PCR set Ag2029 primer #1.
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                                                                                                                                                                                                                                                                                 886 GGGAACATCATCAACATGCAC 906
                                                                                                                                                                                                                                                                                                            2 GGCAAATCATCAACATCAAC 22
                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                0.8%;
                                                                                                                                                                                                                                                                                                                                                                              ADD72164 standard; DNA; 22 BP
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25-JAN-2001; 2001US-0264180P.
20-AUG-2001; 2001US-0313656P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                        17; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GANG/) GANGOLLI E A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-844478/78.
                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (STON/) STONE D J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003195149-A1.
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associated with NoVX, a method for modulating the activity of activity or of latency or prediction to a pathology associated with NoVX, a method for modulating the activity of NoVX, a method for preventing a pathology associated with NoVX, a method for preventing a pathology associated with NoVX, a method for treating or preventing a state in a mammal, an isolated nucleic acid molecule, a cell comprising the vector.

Comprising the nucleic acid molecule, a cell comprising the vector, and antibody that binds immunospecifically to NoVX and a method for producing NoVX. The polypeptides, nucleic acid molecules and antibodies are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or diagnosing diseases such metabolic disorders. The nucleic cobesity, infectious diseases (viral, bacterial, fungal, helminthic, and protozoal), anorexia, cancer, cardiovascular diseases (hypertension, cancer, cardiovascular diseases (hypertension, parkinson's disease, epilepsy, immune disorders (asthmator disease, parkinson's disease, epilepsy, immune disorders (steedarthritis).

Cortozoal), anorexia, cancer, cardiovascular diseases (hypertension, cused as targets for the identification of small molecules that modulate cused as targets for the identification of small molecules that modulate or inhibit e.g. neurogenesis, call differentiation, call proliferation, haematopoiesis, wound healing and angiogenesis, in gene therapy, in chromosome mapping, tissue further used as hybridisation probes, in chromosome mapping, tissue capters, and pharmacogenomics. The present sequence tryping, preventive medicine, and pharmacogenomics. The present sequence crypting, preventive medicine, and pharmacogenomics. The present sequence crypting, preventive medicine, and pharmacogenomics. The present sequence cortographs and angioseculate and proper sequence cortographs.
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                                                                                        mature form of NOVX; or a sequence that is at least 95% identical to, or having one or more conservative amino acid substitutions in, the NOVX proteins. Also included are a composition comprising NOVX and a carrier, methods for determining the presence of or predisposition to a disease associated with altered levels of expression of NOVX or NOVX nucleic acid molecule in a first mammalian subject, a method of identifying an agent that binds to NOVX, a method for identifying a potential therapeutic agent for use in the treatment of a pathology which is related to abstrant expression or interactions of NOVX, a method for screening for a
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ADD72118, ADD72120 and ADD72123, all being endozepine-like proteins); a
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81.0%; Pred. No. 8e+02;
ve 0; Mismatches 4; Indels
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nes 17; Conservative
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ADM31242

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The invention relates to an isolated NoVX polypeptide comprising 3 NOV1 protein variants (NOV12, NOV12 and NOV13) and NOV2 (appearing as ADD72120 and ADD72123, all being endozepine-like proteins); a mature form of NOVX, or a sequence that is at least 95% identical to, or with a sequence that is at least 95% identical to, or composition or or discours. The NOVX proteins Also included are a composition comprising NOVX and carrier, methods for determining the presence of or predisposition to a disease composition of NOVX or NOVX nucleic action associated with altered levels of expression of NOVX or NOVX nucleic action that binds to NOVX, a method for identifying a potential therapeutic agent for use in the treatment of a pathology which is related to aberrant expression or interactions of NOVX, a method for identifying a pathology which is related to aberrant expression or interactions of NOVX, a method for modulating the activity or of latency or predisposition to a pathology associated with NOVX, a method for modulating the activity of a considerable of treating or preventing a pathology associated with NOVX, a method for modulating their ariants or distant and not a mammal, an isolated nucleic acid molecule, a cell comprising the nucleic acid molecule, a cell comprising the nucleic acid molecules and antibodies are useful for treating or antibody that binds immunospecifically to NOVX and a method for producing NOVX. The polypeptides undleaded acid molecules and antibodies are useful for treating or almosting of adeases such metabolic disorder. The nucleic acid molecules and antibodies are useful for treating or almosting or diseases (viral, bacterial, fungal, helminthic, and acid molecules, polypeptides and antibodies are useful for treating or diseases (predisposited disorder; disperse, disbetes, obesity, infectious diseases (viral, bacterial, fungal, helminthic, and therosclerosis), neurodespenses, inflammatory skin disorders, dispetes, parkinson's disease, polypeptide and and polypeptides manufacture of anti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            used as hybridisation probes, in chromosome mapping, tissue preventive medicine, and pharmacogenomics. The present sequence
                                                                                                                                                                                                                                                                                                                                      New isolated NOVX polypeptides and polynucleotides, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for use in therapeutic or diagnostic methods. The nucleic acids are further used as hybridisation probes, in chromosome mapping, tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (real time quantitative) PCR primer used to assay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tissue/cell specific expression of NOVX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 4; SEQ ID NO 33; 89pp; English.
                         29-NOV-2001; 2001US-00997594.
                                                                                           25-JAN-2001; 2001US-0264180P.
20-AUG-2001; 2001US-0313656P.
                                                                      2000US-0253834P.
                                                                                                                                                                                                                                              Stone DJ;
                                                                                                                                                                                                                                                                                                                                                                                                                  asthma, or infections.
                                                                                                                                                                  (GANG/) GANGOLLI E A. (STON/) STONE D J.
                                                                                                                                                                                                                                                                                           WPI; 2003-844478/78.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               represents an RTQ
                                                                                                                                                                                                                                              Sangolli EA,
                                                                      29-NOV-2000;
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Sequence 22 BP; 11 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

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Gaps
                                      0;
        0.8%; Score 14.6; DB 1; Length 22; 81.0%; Pred. No. 8e+02; cive 0; Mismatches 4; Indels
Query Match
Best Local Similarity 81.0%
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RESULT 699

Human apolipoprotein E PCR primer Pl. ADM31242 standard; DNA; 22 BP. (first entry) 20-MAY-2004 ADM31242; 

Human, 88; PCR; primer; apolipoprotein E; ApoE; nucleotide variation; genetic disorder; point mutation; prenatal diagnosis; postnatal diagnosis; somatic mutation; cancer.

US2003082531-A1. Homo sapiens.

01-MAY-2003

99US-00258216 26-FEB-1999; 90US-00482005. 91US-00656575. 15-FEB-1991; 02-DEC-1993; 6-FEB-1990;

(SODE/) SODERLUND H E. (SYVA/) SYVANEN A.

Soderlund HE, Syvanen A;

WPI; 2003-596956/56.

Detecting a specific nucleotide variation at a defined site in a target nucleic acid polymer, useful for pre- or postnatal diagnosis of diseases, comprises extending the detection primer using labeled nucleotide triphosphates.

Example 1; Page 5; 16pp; English.

detectable amount of a target nucleotic acid polymer in single-stranded form with an oligonucleotide primer (where the detection primer comprises several nucleotide residues and is complementary to the nucleotide several nucleotide residues and is complementary to the nucleotide sequence of interest in a region disposed toward the 3' end from the cardinal such that when the primer is hybridised to the polymer; there are no nucleotide residues between the defined site and the 3' end of the primer that are identical to the first or second nucleotide residues to be detected), extending the primer using a polymerising agent in a mixture containing one or more NTPS (and at least one NTP or comprises a means for detecting the incorporation of the NTP in a nucleic acid polymer and optionally one or more offer the reminating NTPs) and detecting the incorporation of the NTP, where the identity of the nucleotide residue at the defined site is determined. Also included are detecting in a patient a predisposition to a genetic disorder resulting from a specific nucleotide variation at a defined site in a genetic material of the patient by employing the steps of the method above, a kit or determining the specific nucleotide variations at a target nucleic can end polymer, a reagent for detecting the attention in a target nucleic acid residue is replaced by an abnormal nucleic mutations leading to altered pathogenicity or resistance to therapy in microorganisms and detecting cells having a point mutation at a defined site in the genetic material. The method is useful for identifying specific point mutations and genetic variations. Specifically, the method can be used for pre- or postnatal diagnosis of hereditary predispositions or diseases, for the detection of somatic mutations in cancer, for the selection of cells and strains for industrial biotechnology and for plant The invention relates to detecting a specific nucleotide variation at a defined site in a target nucleic acid polymer, where a second nucleotide residue replaces the first nucleotide residue, comprises hybridising a acid residue at a defined site within gene of interest, detecting at a defined site in the genome of a microorganism the existence of point and animal breeding. The new method provides several advantages over prior methods. The new method comprises few and easily performed

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procedures, thus especially suited for routine determinations of point mutations and mucleotide variations, allows the quantification of the proportion of mutated cells in a sample as well as the identification of mutations present in as little as 0.5% of the analysed cell population, and is easily automated. The present sequence is a PCR primer used in the method of the invention to detect polymorphisms in the apolipoprotein gene corresponding to amino acids 112 and 158.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cardiovascular, antiarteriosclerotic; hypotensive, cytostatic; anorectic; antidiabetic; immunosuppressive; anti-HIV; neuroprotective; noctropic; antiparkinsonian; antiasthmatic; antiinfertility; cardiomyopathy; atherosclerosis; hypertension; cancer; observe; diabetes; AIDS; multiple sclerosis; graft-versus-host disease; AIDS; Parkinson's disease; esthma; fertility disorder; chromosome mapping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tissue typing; preventive medicine; pharmacogenomic; vaccine; primer; ss.
                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                              Ouery Match

0.8%; Score 14.6; DB 1; Length 22;
Best Local Similarity 81.0%; Pred. No. 8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                  Sequence 22 BP; 9 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                        1301 AGGAGTTCAAGACATACAACT 1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGAGTIGAAGGCCTACAAAT 22
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2002US-03867UP.
2002US-038691P.
2002US-0387078P.
2002US-038708P.
2002US-0387081P.
2002US-038740P.
2002US-038740P.
2002US-0387440P.
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2002US-0386357P.
2002US-0386447P.
2002US-0386459P.
2002US-0386459P.
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2002US-0385615P.
2002US-0385755P.
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2002US-0387659P.
2002US-0387668P.
2002US-0387696P.
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2002US-0387934P.
2002US-0387960P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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07-JUN-2002;
07-JUN-2002;
07-JUN-2002;
07-JUN-2002;
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10-JUN-2002;
10-JUN-2002;
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Burgess CE, Casman SJ, Catterton E, Dhandal M, Edinger SR, Ellerman K, Ettenberg S, Gangolli EA, Gerlach VL, Gorman L, Grosse WM, Gunther E, Guo X, Gusev VY, Herrmann JL, Ji W, Kekuda R Khramtsov NV, Larochelle WJ, Li L, Liang H, Low K, Macdougall JR, Maclachlan T, Malyankar UM, Mcqueeney K, Mezick AJ, Miller CE, Millet I, Padigaru M, Patturajan M, Peyman JA, Qian X, Rastelli L, Rieger DK, Rothenberg ME, Shenoy SG, Shinkets RA, Smithson G, Sukumaran S, Szekeres ES, Vernet CAM, Voss EZ;
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11 M, Edinger SR;
tch VL, Gorman L;
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      12-JUN-2002; 2002US-0388432P.
12-JUN-2002; 2002US-0388432P.
13-JUN-2002; 2002US-0388432P.
14-JUN-2002; 2002US-0389120P.
14-JUN-2002; 2002US-0389146P.
17-JUN-2002; 2002US-0389146P.
18-JUN-2002; 2002US-038964P.
18-JUN-2002; 2002US-038964P.
19-JUN-2002; 2002US-038964P.
19-JUN-2002; 2002US-038964P.
19-JUN-2002; 2002US-038984P.
19-JUN-2002; 2002US-038984P.
19-JUN-2002; 2002US-038984P.
19-JUN-2002; 2002US-038984P.
19-JUN-2002; 2002US-038984P.
19-JUN-2002; 2002US-0389884P.
11-AUG-2002; 2002US-0401828P.
12-AUG-2002; 2002US-040182P.
13-AUG-2002; 2002US-040182P.
13-SEP-2002; 2002US-041050SP.
23-SEP-2002; 2002US-041050SP.
23-SEP-2002; 2002US-041595SP.
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23-OCT-2002, 2002US-0420718P.
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Zhong M,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wolenc AR,
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WPI; 2004-053467/05.

New NOVX polypeptides and nucleic acid molecules useful for preventing or treating NOVX-associated disorders, e.g. cancer, cardiomyopathy, atherosclerosis or diabetes, in chromosome mapping, tissue typing or in pharmacogenomics.

Disclosure; SEQ ID NO 1440; 1503pp; English.

The invention relates to 566 new isolated human polypeptides and their encoding genes, sequences that are at least 95% identical to these or sequences comprising one or more conservative substitutions in these. The polypeptide, polymucleotide and antibodies against the polypeptides are useful in diagnosing, treating or preventing NOVX-associated disorders, diabetes. AIDS, multiple sclerosis, hypertension, cancer, obesity, diabetes. AIDS, multiple sclerosis, graft-versus-host disease, Darkinson's disease, asthma, or fertility disorders. The nucleic acids are further used as hybridization probes, in chromosome mapping, tissue typing, preventive medicine, and pharmacogenomics. The polypeptides are also useful as vaccines. This sequence represents an example of the forward primer used to amplify a probe to isolate the nucleic acid sequences of the invention.

Sequence 22 BP; 9 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Gaps ö 0.8%; Score 14.6; DB 1; Length 22; 81.0%; Pred. No. 8e+02; Live 0; Mismatches 4; Indels Query Match
Best Local Similarity 81.0

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06-MAY-2004
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                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADP84297;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 703
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a immunogenic polypeptide fragment comprising ten to fifty consecutive amino acids of a fully defined detrusor estrogen-regulated protein (DERP). The invention is useful for diagnosing DERP-related disorder such as impaired detrusor contractility, urinary retention, Alzheimer's disease, cardiovascular disease, urinary retention, Alzheimer's disease, cardiovascular disease, osteoporosis, or their combinations. The invention is also useful for generating antibodies, as reagents in diagnostic assays, as identifiers of other gene products involved in the regulation of bladder and smooth muscle function, as screening reagents useful for detecting compounds that are used in the regulation of bladder and smooth muscle function, and as pharmaceutical agents useful for treating symptoms relating to bladder and smooth muscle function. The present sequence is rat DERP DNA
                                                                                                                                                                                                            Detrusor estrogen-regulated protein; DERP; DERP-related disorder; impaired detrusor contractility; urinary retention; Alzheimer's disease; cardiovascular disease; osteoporosis; smooth muscle function; nootropic; neuroprotective; osteopathic; immunostimulant; therapy; rat; RT-PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel purified immunogenic detrusor estrogen-regulated polypeptide fragment useful for generating antibodies and as screening reagents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%; Score 14.6; DB 1; Length 22;
81.0%; Pred. No. 8e+02;
ative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 amplifying reverse transcription (RT)-PCR primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 22 BP; 7 A; 6 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                   Rat DERP DNA amplifying RT-PCR primer #18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 24; SEQ ID NO 35; 48pp; English.
600 TGGGAAACTGGAGACCTACAT 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              957 CCGGCAGAAGGTGCTACACCG 977
                 | ||||| ||||| ||||||||||| TAGGAAAATGGACGCCTACAT 22
                                                                                                                                                                                                                                                                     reverse transcription; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGCAGAGAGGCTATACCG 21
                                                                                                                                                                                                                                                                                                                                                                                22-MAY-2003; 2003US-00444575.
                                                                                                                                                                                                                                                                                                                                                                                                            23-MAY-2002; 2002US-0382830P
                                                                                              ADI19085 standard; DNA; 22
                                                                                                                                                       (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-052160/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                       (KUCH/) KUCHEL G A. (ZHUQ/) ZHU Q.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhu Q;
                                                                                                                                                                                                                                                                                              Rattus norvegicus
                                                                                                                                                                                                                                                                                                                          JS2003232374-A1
                                                                                                                                                       15-APR-2004
                                                                                                                                                                                                                                                                                                                                                      18-DEC-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GA,
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                        N
                                                                                                                           ADI19085
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5694/c ADK96694 standard; DNA; 22 BP.

ADK96694/

ADK96694

axa

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The present invention relates to a polynucleotide isolated from a human gene and is useful for detecting a single nucleotide polymorphism in a human gene or for diagnosing of disease. The invention enables the detection of a single nucleotide polymorphism in a human gene. The present sequence represents a primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G-protein coupled receptor for asthma susceptibility, AAA1, asthma associated alternatively spliced gene 1, primer, PCR: chronic obstructive pulmonary disease; cancer; rhinitis; dermatitis; cytostatic, antiasthmatic, transgenic, asthma locus-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel polynucleotide useful for PCR amplification along with two fragment from another set of sequences, or for detecting single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.6; DB 1; Length 22; 81.0%; Pred. No. 8e+02; rive 0; Mismatches 4; Indels
                                                                                 human; single nucleotide polymorphism; SNP; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ss; AST-1; asthma; IgE mediated disease; human; GPRA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCR primer JEGE1F2 used for cloning human GPRA DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 22 BP; 8 A; 2 C; 10 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 2; SEQ ID NO 5723; 2627pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                  (KAGA-) KAGAKU GLJUTSU SHINKO JIGYODAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nucleotide polymorphism in human gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1450 CATCCATTCTTCCTCAGTCTG 1470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22 carccercricereraters 2
                                        Primer of the invention #2414.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP
                                                                                                                                                                                                                                                           08-MAR-2002; 2002JP-00064373.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-DEC-2002; 2002US-0435846P.
03-JAN-2003; 2003US-0437895P.
26-MAR-2003; 2003US-0458767P.
09-JUL-2003; 2003US-04686000P.
                                                                                                                                                                                                                                                                                                      08-MAR-2002; 2002JP-00064373.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-DEC-2003; 2003WO-FI000973.
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(first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADP84297 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-093977/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2004056866-A1.
                                                                                                                                                                       JP2003259875-A.
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Sequence 17 BP; 2 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
PAX5 alpha or beta gene
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                                                                                                                                                                                                                                                                                                                                               activities. Furthermore, it provides a transgenic animal comprising the asthma locus-1 (AST-1) DNA. This oligonucleotide sequence is a PCR primer
                                                                                                                                                                    This invention relates to the identification of a novel susceptibility locus AST-1 for asthma and other IgE mediated diseases mapped to the human chromosome 7p14-p15. Specifically, it refers to two overlapping genes namely GPRA (G-protein coupled receptor for asthma susceptibility) and AAA1 (asthma associated alternatively spliced gene 1). The present invention describes identifying single nucleotide polymorphisms, as well as insertion or deletion polymorphisms, occurring at different positions in the AST-1 locus, and furthermore providing vectors, host cells, primers and probes in order to determine the status of an individual. Accordingly, it provides a kit to diagnose or assess predisposition to asthma, chronic obstructive pullmonary disease or cancer and other IgE mediated diseases including rhinitis and dermatitis, such that derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Detecting aberrant promoter methylation associated with a predisposition to cancers of the breast, lung and colon in a human, useful for diagnosing or monitoring cancer, comprises detecting methylation of the
                                                                                          New GPRA polypeptides, useful in preparing a composition for diagnosing, treating or preventing asthma, other IgE-mediated disease, chronic obstructive pulmonary disease or cancer,
                           Polvi A, Maekelae S, Vendelin J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stage 2 MSP primer beta-BSM3 used to analyse human PAX5 sequence.
                                                                                                                                                                                                                                                                                                                                   pharmaceutical compositions exhibit cytostatic and antiasthmatic
                                                                                                                                                                                                                                                                                                                                                                          used to clone human GPRA DNA, given in table 4 of the invention.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aberrant promoter methylation; PAXS alpha; beta; breast; lung; colon cancer; human; ss; primer; PCR; beta-BSM3.
                                                                                                                                                                                                                                                                                                                                                                                                                      10.8%; Score 14.6; DB 1; Length 22; ilarity 81.0%; Pred. No. 8e+02; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 22 BP; 5 A; 9 C; 4 G; 4 T; 0 U; 0 Other
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1568 CTGACTCAGGCAGGCCAGCTT 1588
                           Laitinen LA,
                                                                                                                                               Example 7; Page 75; 265pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGAGTGAGGGAGTCCAGCTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-OCT-2002; 2002WO-US033499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-OCT-2001; 2001US-0348407P
                                       Salmikangas P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Belinsky SA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-618364/58.
                                                                WPI; 2004-500286/47.
                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
 (GENE-) GENEOS OY
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                        Laitinen T,
Pulkkinen V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                      17;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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                                               The invention relates to a novel method for detecting aberrant promoter methylation associated with predisposition to cancers of the breast, lung and colon in a human comprising detecting methylation of the PAK5 alpha or beta gene. The method of the invention may be useful in screening for, monitoring or diagnosing human cancer, particularly breast, lung or colon cancer. The current sequence is that of the stage 2 MSP (methylation specific PCR) primer beta-BSM3 of the invention used to analyse the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antibodies specific for membrane bound IgA - and hybridomas producing them, used to increase IgA prodn., partic. in patients with infectious disease or allergy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.4; DB 1; Length 16; 93.8%; Pred. No. 6.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                             Sequence 16 BP; 0 A; 9 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA primer for human IgA membrane anchor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 9; 12pp; English.
Disclosure; Page 6; 31pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                560 GCCGCCGCTCCGTCG 575
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91US-00760765
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 93.8
Matches 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (TANO-) TANOX
                                                                                                                                                                                                                                                                          PAX5 sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-2003
24-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-JUL-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-SEP-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chang TW;
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AAV94784 standard; RNA; 17

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AAV94784
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligo:nucleotide(s) corresponding to human IgA segments - comprising membrane anchoring extracellular peptide segments, used to develop prods.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Exon; membrane anchoring extracellular peptide; human; immunoglobulin; IgA; constant heavy region; cell surface; lung fibroblast cell line; primer; PCR; amplification; probe; isoform; splicing site; antibody; post-transcriptional processing; prophylaxis; infectious disease; allergy; immunodeficiency disease; ds.
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                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human IgA membrane anchoring extracellular peptide segment primer #1
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      DB 1; Length 17;
                                                                  1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 2 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
                                    7e+02;
0.8%; Score 14.4; D: 93.8%; Pred. No. 7e+0: iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Col 15; 12pp; English.
                                                                                                                                 1273 GAGACGTGGCCAGGCA 1288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          89US-00369479.
89US-00455080.
91US-00760765.
93US-00095068.
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                                                                                                                                                                                                                                                                                                                                                        AAT10550 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for therapy and diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chang TW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1996-087117/09.
   Query Match
Best Local Similarity
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les 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (TANO-) TANOX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-JUN-1989;
22-DEC-1989;
16-SEP-1991;
20-JUL-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-OCT-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAR-2003
18-JUL-1996
                                                                     15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-JAN-1996
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                                                                                                                                                                                         17
                                                                                                                                                                                                                                                                                                                                                                                                                AAT10550;
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AATTO
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BECON
KWW WEI
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                                                              Matches
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The present sequence invention describes ribozymes targeted to modulate the synthesis and/or expression of interleukin (IL)-2R gamma encoded RNA. AAV93889 to AAV94574 represent specifically claimed ribozymes, and AAV94575 to AAV95260 represent specifically claimed substrate sequences from the present invention. The ribozymes can be used for the treatment off, e.g. graft rejection, autoimmune disease, cancer, psoriasis, allergy and other inflammatory conditions. The ribozymes are also used to induce tolerance in a recipient to alloantigen from a donor
                                                                                                                                                                                                                                                                                                                                                                                                                    Ribozymes targetted to interleukin 2 - useful for treating e.g. cancer, autoimmune disease and allergies.
                                                                                        Human, IL-2 receptor g-chain; interleukin 2 receptor gamma chain;
hammerhead ribozyme; hairpin ribozyme; substrate; expression; cancer;
autoimmune disease; psoriasis; allergy; inflammatory disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Membrane bound; immunoglobulin A; anti-IgA antibody; immunogen; B-cell leukemia; lymphoma; IgA-mediated nephropathy; diagnosis; PCR; primer; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Membrane extracellular peptide fragment of immunoglobulin primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.8%; Score 14.4; DB 1; Length 17; 56.2%; Pred. No. 7e+02; tive 6; Mismatches 1; Indels
                                                            Human IL-2 receptor g-chain substrate position 1330.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 1 A; 7 C; 3 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 4; Page 37; 61pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1456 TTCTTCCTCAGTCTGG 1471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                97WO-US021748.
                                                                                                                                                                                                                                                                                            96US-00758306.
                                                                                                                                                                                                                                                                                                                                                         Mcswiggen JA;
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UUCUCCCUCAGUCUGG 16
                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT86543 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (revised)
                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1998-333332/29.
                                                                                                                                        graft rejection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                         Stinchcomb DT,
                                                                                                                                                                      sapiens.
                                                                                                                                                                                                    WO9824913-A2
                                                                                                                                                                                                                                                              02-DEC-1997;
                                                                                                                                                                                                                                                                                            03-DEC-1996;
                                24-FEB-1999
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20-MAR-1998
                                                                                                                                                                                                                                 1-JUN-1998
 AAV94784;
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Best Local
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Matches
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1273 GAGACGIGGCCAGGCA 1288

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GAGACTTGGCCAGGCA 2

17

chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
Parkinson's disease; ataxia; Huntington's disease;
Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

antisense therapy; cytostatic; antiinflammatory; haemostatic;

12-MAR-2002 (first entry) Human CD20 G-cleaver #56.

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cerebroprotective; nootropic; neuroprotective; antiparkinsonian; cerebroprotective; nootropic; neuroprotective; MOGO; hammerhead xibozyme; Mosyme; Coleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin; lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; huft; immune thromborytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
purified DNA of positive clones identified by the probe AAT86542. An oligonuclectide probe (AAT86542) which corresponds to a segment located in the CH3 coding region of immunoglobulin allotype alphal and alpha2 and was synthesised and used a a probe to screen phage clones containing oil or alpha2 gene segments. The library was constructed using genomic DNA from human lung fibroblast line, W138, packaged in phage FIX. Primer AAT86543 is located in the intron about lkb downstream from CH3 exon and primer AAT86544 is a very conservative segment in the mouse alpha membrane exon. The invention relates to a unique extracellular peptide segments form, entirely or in part, antigenic epitopes unique to membrane bound but not secreted IgA, and thereby provide a unique to membrane bound but not secreted IgA, and thereby provide a unique epitope on the IgA-bearing B cells to which membrane bound IgA is attached. These peptide segments can be used as immunogens to generate antibodies which specifically, target membrane-bound IgA and IgA-bearing B cells. (Updated
                                                                                                                                                                                                                                                                                                                                                                                                    Peptide fragments of human membrane-bound immunoglobulin A - for generating anti-IgA antibodies, useful for treatment of B-cell leukaemia(s) or lymphoma(s) or IgA-mediated nephropathy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 7e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 2 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Col 11-12; 10pp; English
                                                                                                                                                                                                   90US-00515604.
91US-00760765.
92US-00973321.
                                                                                                            88US-00226421.
88US-00229178.
88US-00272243.
89US-00369479.
89US-00369625.
89US-00455080.
                                                                                                                                                                                                                                      93US-00090527.
93US-00095068.
93US-00137253.
93US-00140721.
                                                                                                                                                                                                                                                                                                      94US-00249558
                                                                                                                                                                                                                                                                                                                               (TANO-) TANOX BIOSYSTEMS INC
                                                                          96US-00619790
                                                                                                                                                                                                                                                                                          94US-00180145
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                                                                                                                                                                                                                                                                                                                                                        Chang NT;
                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-017568/02.
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Matches 15; Conserv
  Homo sapiens.
                                                                                                                                                                                                     27-APR-1990;
                                                                                                                                                                                                                16-SEP-1991;
                                                                                                                                                                                                                                                                                                      26-MAY-1994;
                                                                         20-MAR-1996;
                                                                                                                                                   21-JUN-1989;
                                                                                                                                                                 21-JUN-1989;
                                                                                                                                                                                         23-JAN-1990;
                                                                                                                                                                                                                                         09-JUL-1993;
                                                                                                                                                                                                                                                    20-JUL-1993;
                                                                                                                                                                           22-DEC-1989
                                                                                                                                                                                                                                                                14-OCT-1993,
                        US5690934-A
                                                                                                                                        16-NOV-1988
                                                                                                                                                                                                                                                                            22-OCT-1993
                                                 25-NOV-1997
                                                                                                                                                                                                                                                                                          11-JAN-1994
                                                                                                                                                                                                                                                                                                                                                       Chang TW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
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11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P.

(RIBO-) RIBOZYME PHARM INC.

09-FEB-2001; 2001WO-US004273

WO200159103-A2.

16-AUG-2001

sapiens.

Synthetic

Chowrira BM;

Mcswiggen J,

Blatt L,

WPI; 2001-607195/69.

(CHOW/) CHOWRIRA B M.

MCSWIGGEN J.

(BLAT/) (MCSW/)

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Expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGO). The cegulates expression of a neurite growth inhibitor gene (NGO). The cegulates expression of a neurite growth inhibitor gene (NGO). The nucleic acids may be enzymatic nucleic acid cleaving a an RNA molecule DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule of consessing an NCH mocif), a C-cleaver (Lieaving RNA with a NCW in with a NCW motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA cof CD20 in the presence of a divalent cation that is preferably MG<sup>2</sup> +.

Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level cof CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular noncreating modeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytopana (IMC) small B-cell lymphocytic lymphoma, compound (MCL), immunocytopana (IMC) small B-cell lymphocytic lymphoma, correspecting nucleic acid may be contacted with a cell to reduce NOGO gene in the presence of a divalent cation that is preferably Mg<sup>2</sup> +. Furthermore, the concletic acid may be contacted with a cell to reduce NOGO activity of the concletic acid may be contacted with a cell to reduce NOGO activity of the concletic acid may be concacted with a cell to reduce NOGO activity of the concletic acid may be contacted with a cell to reduce NOGO activity of the concletic may further comprise the use of one or more cell and treat a patient having a condition associated with the level of therapies. In particular, the NOGO-targetting nucleic acid may be used to condition associated with a cell to reduce NOGO activity of the contacted with a condition associated with a cell energient 
Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.
                                                                                                                                                                                                                                                                                                                                                                             Claim 30; Page 152; 200pp; English.
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Gaps

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1273 GAGACGTGGCCAGGCA 1288

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Conservative

GAGACTTGGCCAGGCA

17

ABK03441 standard; RNA; 17 BP.

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RESULT 709 ABK03441/ ABK03441;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention provides single-stranded oligonucleotides which can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE; mismacch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein B; LDLR; familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense; UDP-qlucuronosyltransferase; amyloid precursor protein; presenilin-1; Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and for chemical
                                                                                                                                                                              Gaps
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                                                                                                                                          DB 1; Length 17;
                                                                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HBA2 mutation correcting oligonucleotide SEQ ID NO: 2930.
                                                              sequence is a G-cleaver molecule of the invention
                                                                                                  Sequence 17 BP; 4 A; 4 C; 6 G; 0 T; 3 U; 0 Other;
                                                                                                                                        Score 14.4; DB 1
Pred. No. 7e+02;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 7; Page 207; 294pp; English.
                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rice MC;
                                                                                                                                                                                                                  395 ATGAGGTGCAGTCTCC 410
                                                                                                                                          0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-MAR-2000; 2000US-0192176P.
27-MAR-2000; 2000US-0192179P.
01-JUN-2000; 2000US-0208538P.
30-OCT-2000; 2000US-0244989P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-MAR-2001; 2001WO-US009761
                                                                                                                                                                                                                                                                                                                                                     ABA80084 standard; DNA; 17
                                                                                                                                                                                                                                                          ATCAGGTGCAGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                   24-JAN-2002 (first entry)
                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kmiec EB, Gamper HB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (UYDE ) UNIV DELAWARE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-639230/73.
                                                                                                                                Query Match
Best Local Similarity
Matches 15; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antilipemic; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                             ABA80084;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma, APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE; mismacch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR; familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense; UDP-glucuronosyltransferase; amyloid precursor protein; presentilin-1; Albachimen; a disease; cytostatic; antisickling; antianaemic; haemostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical modification.
              haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia, Alzheimer's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting
                                                                                                                                                                                                Gaps
cancer, adenosine deaminase deficiency, cystic fibrosis,
                                                                                                                                                                                                .,
                                                                                                                                                       0.8%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 7e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HBA2 mutation correcting oligonucleotide SEQ ID NO: 2931.
                                                                                                                    Seguence 17 BP; 3 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 7; Page 207; 294pp; English.
                                                                        oligonucleotides of the invention
                                                                                                                                                                                                                                        1631 CCAGCAGCAGCGCT 1646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-0192176P.
2000US-0192179P.
2000US-0208538P.
                                                                                                                                                                                                                                                                                                                                                                                 ABA80085 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-MAR-2001; 2001WO-US009761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-OCT-2000; 2000US-0244989P
                                                                                                                                                                                                                                                                     17 CCAGCAGGCAGTGGCT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                Matches 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-639230/73.
                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         antilipemic; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200173002-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-MAR-2000; 2
27-MAR-2000; 2
01-JUN-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-JAN-2002
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                                                                                                                                                           Query Match
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AAF91027 standard; DNA; 17
                                                                                (first entry)
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                                                                                                                                                                                                                                                                                                                                            WPI; 2001-159855/16.
                                                                                                                                                                                            WO200109183-A2.
                                                                                                                                                                                                                                                                                                                      Brinkmann U,
                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                              30-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-JAN-2003
                                                                               04-MAY-2001
                                                                                                                                                                                                                  08-FEB-2001.
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                                                         AAF91027;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
           RESULT 713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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                        AAF91027
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to canine beta-galactosidase. The cDNA molecule and kit are useful for screening the R60H mutation of acid beta-galactosidase. The cDNA molecule is also useful for screening Portuguese Water dogs to eliminate carriers of GNL-gangliosidosis from breeding
presentin-2 (PSEN2). These can be used in the gene therapy of diseases such as cancer, adenosine deaminase deficiency, cystic fibrosis, haemophilia, hypercholesterolamia, thalassaemia, sickle cell anaemia, Alzheimer's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New beta-galactosidase gene isolated from Canis familiaris, useful for screening R60H mutation of acid beta-galactosidase, or for screening Portuguese Water dogs to eliminate carriers of GM1-gangliosidosis from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                       Portuguese Water dog; beta galactosidase; R60H; GM1-gangliosidosis;
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                                                                                                    0.8%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 7e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                 Primer #3 used to isolate dog beta-galactosidase cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 2 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                               Sequence 17 BP; 3 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zeng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Raghavan S,
                                                various syndromes. The present secoligonucleotides of the invention
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                                                                                                                                                  1631 CCAGCAGCAGCGCT 1646
                                                                                                                                                                                                                               AAC83038 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-00436605.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KOLODNY E H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-006329/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WANG Z.
RAGHAVAN S.
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Les 15; Conserv
                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         breeding programs
                                                                                                                                                                                                                                                                                                                                                        Canis familiaris.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZENG B.
                                                                                                                                                                                                                                                                                                                                                                                                                          09-NOV-1999;
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                                                                                                      Query Match
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Matches
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The present invention provides nucleotides encoding molecular variants of the human multi drug resistance-1 (MDR-1) protein. These can be used to identify compounds capable of treating multidrug resistance and sensitivity interfering resulting from polymorphisms in MDR-1, which can lead to difficulties in treating cancer, cardiovascular, neuronal, inflammatory and CNS diseases
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New polynucleotide encoding a molecular variant Multi Drug Resistance (MDR)-1 polypeptide is useful for diagnosing and treating diseases associated with abnormal MDR-1 expression or function, e.g. cancer.
                                                   Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer; inflammatory disease; neuronal disease; CNS disease; cardiovascular disease; PCR primer; ss.
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Human multi drug resistance-1 gene related sequence SEQ ID NO: 114.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eichelbaum M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
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                                                                                                                                                                                                                                                                                                                                                                                                          99EP-00114938
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hoffmeyer S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABV78818 standard; DNA; 17
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The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10p12.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of the body with decreased expression or activity of human for the province of the suppression of a solicity of human for the suppression or activity of human suppression and manufacture of a medicament for treatment or prevention of the suppression and manufacture of a medicament for treatment or prevention of the suppression and manufacture of a medicament for treatment or prevention of the suppression and manufacture of a medicament for treatment or prevention of the suppression and manufacture of the suppression and manufacture of the suppression and manufacture of the suppression and suppression or activity of human suppression and manufacture of the suppression and suppres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention
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2001WO-US000665.
2001WO-US000667.
2001WO-US000668.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001; 2001WO-US000669.
23-MAY-2001; 2001US-00B64761.
09-OCT-2001; 2001US-0327898P.
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Best Local Similarity 93.8
Matches 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001;
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EP1229046-A2
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The present interior in the state of the state of the present interior into present interior into present interior into present interior into protein (HTPL, see ABV78759 to ABV78752 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L. (I for long). HTPL states an overall structure organisation with the Patched protein. The shares an overall strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome lop12.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of therapy and manufacture of a medicament for treatment or prevention of the such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, shelteral muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human, hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to human testis expressed Patched like
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 7e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human ERG DNAzyme target sequence Seq ID No 1454.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 0 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for treating subjects having defects in HTPL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; Page 72; 718pp; English.
                                                                                                                                                                             30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
33-JAN-2001; 2001WO-US000669.
33-MAY-2001; 2001US-00864761.
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                                                                                                                     28-JAN-2002; 2002EP-00001167
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                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-676582/73.
                                                                                                                                                                                                                                                                                                                                                 (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Homo sapiens
                                      EP1229046-A2
                                                                             07-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABK18807;
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                                                                                                                                                                                                                                                                                                                                                                                        Zhan J;
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09-APR-2002 (first entry)

Tue Nov

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The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Bwing's sarcoma, melanoma, conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, cumour angiogenesis, diabetic retinopathy, macular degeneration, then angiogenesis, diabetic retinopathy, macular degeneration, or uncarriage in well of the partient with macular degeneration, or under syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. Leukaemia or tumour conjunction suitable for the treatment. Leukaemia or tumour conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a coll, by contacting (I) is useful for reducing ERG activity in a call, by contacting (I) with RNA, in the presence of a divalent carion such as Mg2+. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to the presence of ERG RNA in a cell. (I) is useful for specifically the presence of ERG RNA in a cell. (I) is useful for specifically carryating genes that share homology with ERG gene or ERG fusion genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel polynucleotide which down regulates expression of Ets-related gene, useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
               neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angodibroma of tubercous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Randi AM;
angiogenesis; diabetic retinopathy; macular degeneration;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mcswiggen JA, Mclaughlin F,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 4; Page 92; 149pp; English.
                                                                                                                                                                                                                                                                                                              16-MAY-2001; 2001WO-US015866.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jarvis T, Von Carlowitz I,
                                                                                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC. (GLAX ) GLAXO GROUP LTD.
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                                                                                                                                                                                                              WO200188124-A2.
                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                              22-NOV-2001
                                                                                                                   amberzyme.
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Matches
                               0
                               Gaps
                               0
0.8%; Score 14.4; DB 1; Length 17;
11.2%; Pred. No. 7e+02;
ve 2; Mismatches 1; Indels
                             5;
                                                           1297 AACGAGGAGTTCAAGA 1312
             81.2%;
                                                                                                                                                              ABK17468 standard; RNA; 17
                                                                                       1 AACGGGGAGUUCAAGA
                               Conservative
             Local Similarity
Les 13; Conserv
 Query Match
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Best Loca Matches

ABK17468;

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RESULT 717 ABK17468

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The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, cumour angiogenesis, diabetic retinopathy, macular degeneration, necvascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, port-whose stains, Sturge Meber syndrome, Nippel-Trenaunay-Meber syndrome, Oeler-Weber-rendu syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or cell, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of adivalent cation such as Mg4+. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically
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                                                                                   Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ening's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel polynucleotide which down regulates expression of Ets-related genuseful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
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                                            Human ERG hammerhead ribozyme target sequence, Seq ID No 115.
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31.2%; Pred. No. 7e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-MAY-2001; 2001WO-US015866.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GLAX ) GLAXO GROUP LTD
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                              WO200188124-A2.
                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
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                                                                                                                                                                                                                                                                                   amberzyme.
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Pred. No. 7e+02;

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ophthalmological, antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour anglogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; veruca vulgaris; anglofibroma of tuberous selerosis; port.wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenanuay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel polynucleotide which down regulates expression of Ets-related gen useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
                                                                                                                      Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
                                                                                             Human ERG hammerhead ribozyme target sequence, Seq ID No 716.
                                                                                                                                                                                                                                                                                                                                                                                                           Mcswiggen JA, Mclaughlin F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 4; Page 72; 149pp; English.
                       ABK18069 standard; RNA; 17 BP.
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                                                                                                                                                                                                                                                                                                                                                                     (RIBO-) RIBOZYME PHARM INC. (GLAX ) GLAXO GROUP LTD.
                                                                     09-APR-2002 (first entry)
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                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                              22-NOV-2001
                                                                                                                                                                                                                        amberzyme.
                                               ABK18069;
RESULT 718
            ABK18069
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The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating carcoma, methanoma, conditions selected from cancer, lymphoma, Ewing's sarcoma, methanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge Weber syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or call, by contacting (I) is useful for reducing ERG activity in a ccell, by contacting (I) with RNA, in the presence of a divalent cation such as Mg2+. (I) is useful for diagnosis of conditions and cation such as Mg2+. (I) is useful for diagnosis of conditions and cations such as that share honology with its especial such as related to the expression of ERG, and as diagnostic tool to the presence of ERG RNA in a cell. (I) is useful for specifically caramine genetic drift and mutations with its especial such as respected to the expression of ERG, and as diagnostic and cating genes that share honology with signal and such such as manual and such as manual and such as manual and such as manual and such as a manual and such as ABK/7354\_ABK22719 represent nucleic acids, including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and related PCR primers of the invention Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;

0.8%; Score 14.4; DB 1; Length 17;

Query Match

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neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca vulgaris, angiofibroma of tubercous sclerosis, port-wine stains, Sturge weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu conditions and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. Deukaemia or tumour the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a call, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent cation such as Mg2+. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically the presence of ERG RNA in a cell. (I) is useful for specifically the presence of ERG RNA in a cell. (I) is useful for specifically the presence of ERG RNA in a cell. (I) is useful for specifically the presence of ERG RNA in a cell. (I) is useful for specifically call and a cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically call and a cells or to detect the presence of ERG RNA in a cell. (II) is useful for specifically call and a cells or to detect the presence of ERG RNA in a cell. (II) is useful for specifically call and conditions and condi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ophthalmological; antiarthritis, antipsoriatis; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous selerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
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                                                    Gaps
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                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human ERG Amberzyme target sequence Seq ID No 1903.
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                                              Mismatches
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81.2%; Fit. 2;
                                                                                                           719
                                                                                                                                                                                                                                                                                                     ABK19256 standard; RNA; 17 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                        704 AGGAGATCAGACTGGA
                    Best Local Similarity 81.2
Matches 13; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                 09-APR-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            amberzyme.
                                                                                                                                                                                                                                                                                                                                                            ABK19256;
                                                                                                                                                                                                                                              RESULT 719
                                                                                                                                                                                                                                                                              ABK19256
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gene,

Randi AM;

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2 AACTTCGTTCTGCAAG 17
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                                                      ABS75019
                                        RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, heapers. The products of the invention have abortive and contraceptive activity and can be used for generally or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPPE is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPPE isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies autenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention
ABKI7354-ABK22719 represent nucleic acids, including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and related PCR primers of the invention
                                                                                                                                                                                                                                                                                                                                     PAPP-E; human; pregnancy associated plasma protein B; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.
                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy
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                                                                             0.8%; Score 14.4; DB 1; Length 17;
81.2%; Pred. No. 7e+02;
tive 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 4 A; 4 C; 3 G; 6 T; 0 U; 0 Other;
                                                      Sequence 17 BP; 6 A; 4 C; 5 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                              Human PAPP-Ea associated 17-mer SEQ ID 543.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 2; Page 146; 353pp; English.
                                                                                                                                     1295 CCAACGAGGAGTTCAA 1310
                                                                                                                                                                                                                              ABS75017 standard; DNA; 17 BP.
                                                                                                                                                      2 CCAACGGGGAGUUCAA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-APR-2001; 2001US-00827998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAY-2000; 2000US-0207456P
                                                                                                                                                                                                                                                                                    (first entry)
                                                                        Query Match
Best Local Similarity 81.29
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GUYY/) GU Y.
(SHAN/) SHANNON M E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-697817/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                        US2002102252-A1.
                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                    24-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-AUG-2002
                                                                                                                                                                                                                                                         ABS75017;
                                                                                                                                                                                                    RESULT 720
                                                                                                                                                                                                                   ABS75017
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This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, happper. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The nucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. Papper E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence reperseents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention
                                                                                                                                                                                                                                            PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.
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                                                                                                                                                                                    Human PAPP-Ea associated 17-mer SEQ ID 545.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-APR-2001; 2001US-00827998.
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ABS75019 standard; DNA; 17
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                                                                                                                         (first entry)
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les 15; Conservative
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(SHAN/) SHANNON M
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                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
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                                                                                                                         24-DEC-2002
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                                                              ABS75019;
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Human CLCAl gene enzymatic nucleic acid #1610.

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Gaps

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The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The catamine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 and a cell. This sequence represents an
                                antiliflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
                                                                                                                                                                                                                                                                                                                                                                                                                  Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.4; DB 1; Length 17; 75.0%; Pred. No. 7e+02; ative 3; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      enzymatic nucleic acid molecule of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human CLCAl gene enzymatic nucleic acid #1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 4; Page 100; 152pp; English.
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                                                                                                                                                                                                                                                        39-AUG-2001; 2001WO-US024970.
                                                                                                                                                                                                                                                                                               09-AUG-2000; 2000US-0224383P.
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                                                                                                                                                                                                                                                                                                                                    (RIBO-) RIBOZYME PHARM INC
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Best Local Similarity
Tahas 12; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-217145/27.
                                                                                                                                                                                                                                                                                                                                                                           (THOM/) THOMPSON J.
                                                                                                                                                                            WO200211674-A2
                                                                                                  acetylcysteine
                                                                                                                                       Homo sapiens.
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ID ABK5
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AC ABK5
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DT 02-J
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DB Huma
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The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, connec, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the creatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 RNA in a cell. This sequence represents an
chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic; acetylcysteine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human, chloride channel calcium activated 1, CLCA1, ss; antiasthmatic; antiinflammatory, chronic obstructive pulmonary disease, COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Enzymatic polynucleotide that down regulates expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 5 A; 5 C; 4 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                              Mckenzie T, Ayers D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human CLCAl gene enzymatic nucleic acid #967.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 4; Page 131; 152pp; English.
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                                                                                                                                                                                                                                                                                 (RIBO-) RIBOZYME PHARM
                                                                                                                                                                                                                                                                                                   (SYNT ) SYNTEX USA LLC (THOM/) THOMPSON J.
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                                                                                 Homo sapiens
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                    Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
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                                                                                                                                                                                                                                                                                       Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.
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                                                                                                                                                                                                                  Szymkowski DE;
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0.8%; Score 14.4; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 7e+02;
Matches 14; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 8 A; 6 C; 2 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                                                  Ayers D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                enzymatic nucleic acid molecule of the invention
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                                                                                                                                                                                                                  Mckenzie T,
                                                                                                                                                                                                                                                                                                                                                    Claim 4; Page 75; 152pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                672 AAGCAAGCTCACAGAC 687
                                                                                                   09-AUG-2001; 2001WO-US024970.
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                                                                                                                              09-AUG-2000; 2000US-0224383P
                                                                                                                                                          (RIBO-) RIBOZYME PHARM INC. (SYNT ) SYNTEX USA LLC.
                                                                                                                                                                                                                   Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                            WPI; 2002-217145/27.
                                                                                                                                                                                        THOMPSON J.
                                          WO200211674-A2.
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                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-JUL-2002
                                                                                                                                                                                                                     Thompson J,
Grupe A;
                                                                       14-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABK57560;
                                                                                                                                                                                        THOM/)
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The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic cobstructive pulmonary disease (CDED), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions contrained to a will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, chence, are useful for treatment of a patient having a condition contrained with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 RNA in a cell. This sequence represents an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.
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                                                                                                                                                                                                                                                                                                                                         Szymkowski DE;
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31.2%; Pred. No. 7e+02;
ive 2; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 8 A; 4 C; 2 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                      Thompson J, Mcswiggen J, Mckenzie T, Ayers D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; Page 129; 152pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    604 AAACTGGAGACCTACA 619
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                                                                                                             09-AUG-2001; 2001WO-US024970.
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                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM
                                                                                                                                                                                                                                                            USA LLC.
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                                                                                                                                                                                                                                                                                    (THOM/) THOMPSON J.
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WO200211674-A2.
                                                                                                                                                                                                                                                            SYNTEX
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                                                        14-FEB-2002,
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                                                                                                                                                                                                                                                                                                                                                                             Grupe A;
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of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningits, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of molecule is selected from the group of ribozymes and Zinzyme. The nucleic acid molecules further comprise at least fire ribose residues, at least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID No 1 to 37080 are claimed, however, SEQ ID No 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid
                                                                                                                                                                                                                                                                            The invention relates to nucleic acid molecules that modulate replication
                                                                                                                                    New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
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93.8%; Pred. No. 7e+02;
Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 4 A; 5 C; 2 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                               Claim 23; SEQ ID NO 14095; 495pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WNV Zinzyme substrate SEQ ID NO 4338.
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                                             Mcswiggen JA;
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(MCSW/) MCSWIGGEN J A.
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(MCSW/) MCSWIGGEN J A.
                                                                                        WPI; 2002-706994/76
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                                             Blatt L,
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93.8%; Pred. No. 7e+02;
ative 0; Mismatches
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                19-OCT-2001; 2001WO-US048350.
                                                            20-OCT-2000; 2000US-0242411P.
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                                                                                                         (RIBO-) RIBOZYME PHARM INC.
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                                                                                                                                                                                                       Mcswiggen JA;
                                                                                                                                 (BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J A.
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es 15; Conserv
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                                                                The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (MNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis, myocarditis, menningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-cleaver, DMAYZME, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least three of the 5 terminal nucleotides and a 3 end amodification of a 3 * 3, inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claaned, however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acid molecule that modulates replication of West Nile Virus (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           wnv, West Nile Virus, antiinflammatory, cytostatic, hepatotropic, virucide, neuroprotective, antibacterial, replication, panoreatitis, encephalitis, myocarditis, meningitis, infection, hepatitis, liver failure, cancer, cirrhosis, Hammerhead, Inozyme, DNAzyme,
                                                                                                                                                                                                                                                                                                                   Gaps
 (WNV), useful for treating a condition related to WNV infection e.g. pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
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                                                                                                                                                                                                                                                              Sequence 17 BP; 0 A; 1 C; 10 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 23; SEQ ID NO 6746; 495pp; English.
                                        Claim 23; SEQ ID NO 4338; 495pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WNV Amberzyme substrate SEQ ID NO 6746.
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                                                                                                                                                                                                                                                                                                                                                                       16 CAACCAACCCCACGC 1
                                                                                                                                                                                                                                                                                                       93.8%;
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Query Match
Best Local Similarity 93.00,
Best Local Similarity 93.00,
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(BLAT/) BLATT L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-APR-2004 (first entry)
                                                                                                                                                                                                                                        molecule of the invention
                                                                                                                                                                                                                                                                                                                                               429 CAACCATCCCCCACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mcswiggen JA;
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(MCSW/) MCSWIGGEN J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Amberzyme; Zinzyme; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       West Nile Virus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACN06743;
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                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 729
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The invention relates to nucleic acid molecules that modulate replication of the West Nile Virus (WNV). The nucleic acid molecules are useful for treating a condition related to WNV infection e.g. pancreatitis.

encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of Hammerhead, Inozyme, G-Cleaver, DNASyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, at least ten 2'-O-methyl modifications, phosphorothioate linkages on at
treating a condition related to WNV infection e.g. pancreatitis, encephalitis, myocarditis, meningitis, neurologic infection, hepatitis, liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid molecule is selected from the group of ribozymes consisting of hummerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The nucleic acid molecules further comprise at least five ribose residues, least ten 2'-O-methyl modifications, phosphorothicate linkages on at least three of the 5 terminal nuclecides and a 3' end modification of a 3'-3' inverted abasic molety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  wnv, west Nile Virus; antiinflammatory; cytostatic; hepatotropic; virucide; neuroprotective; antibacterial; replication; pancreatitis; encephalitis; myocarditis; meningitis; infection; hepatitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 7e+02;
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(MCSW/) MCSWIGGEN J A.
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given in the specification, a sequence containing at least 15 consecutive mucleotides from the 17 mer sequence with after optimal alignment, at least 80 % identify to the 17 mer sequence, a sequence that controlling at least 80 % identify to the 17 mer sequence, a sequence that thybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic caids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, containing the vector or antibodies directed against the polypeptides are useful for vector or antibodies directed against the polypeptides are useful for the preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or call degeneration, specifically cancer but also Alzheimer's disease and confinent samples is useful for diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein ö least three of the 5' terminal nucleotides and a 3' end modification of a 3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080 are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given in the specification. The present sequence is that of a nucleic acid molecule of the invention Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schlzophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds. New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies The invention relates to a novel isolated 17 mer nucleic acid sequence Gaps ; Tumour suppression related human fukutin oligo SEQ ID No 247. DB 1; Length 17; 1; Indels Sequence 17 BP; 5 A; 2 C; 5 G; 0 T; 5 U; 0 Other; 0.8%; Score 14.4; DB 1 75.0%; Pred. No. 7e+02; iive 3; Mismatches Disclosure; Page 63; 720pp; French. Tuijnder M; 877 GATGACTGTGGGAACA 892 (MOLE-) MOLECULAR ENGINES LAB 2 GAUGACUGUUGGAACA 17 17-SEP-2002; 2002WO-IB004208. 17-SEP-2001; 2001FR-00011978 ABT34610 standard; DNA; 17 (first entry) Local Similarity 75.0 nes 12; Conservative and transfected cells. Telerman A, Amson R, WPI; 2003-313353/30. WO2003025175-A2 Homo sapiens. 12-JUN-2003 27-MAR-2003. ABT34610; Query Match Best Loca Matches RESULT 731 000000**x**8 g ð

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chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                         Gaps
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enzymatic nucleic acid, H-Ras, N-Ras, HIV, cytostatic, anti-HIV,
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3.8%; Pred. No. 7e+02;
ve 0; Mismatches 1; Indels
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06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
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Matches 15; Conservative
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49 CCAGCAGTGTGACTGC 64

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ABZ60189;

ABZ60189/

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The invention relates to a novel collection of cultured cells, comprising at least 5 genotypically distinct cells, where each of the at least 5 genotypically distinct cells, where each of the at least 5 genotypically distinct cells at a target locus common the at least 5 genotypically distinct cells at a target locus common among them, and where each of the at least 5 genotypically distinct cells can be separately assayed. The collection of cells is useful for identifying genotypes of a target locus that alter a cellular phenotype. The collection is also useful for pharmacogenomic studies, and in studies of structure-activity relationships of existing, and of potential new, therapeutic agents permitting multiplex analysis of the effects of amino acid changes on ligand-receptor interactions. The sequences shown in ACC79391-ACC79374 represent human ABCB1 (MDR1) targeting oligos. The sequences shown in ACC79375-ACC74126 represent human CYP2D6 targeting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel cultured cell collection comprising at least 5 genotypically distinct cells each of which is coisogenic with respect to other cells at target locus common among them, useful for identifying target locus
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ABCB1 (MDR1); targeting oligonucleotide; CYP2D6; ss.
                                                                Human; cultured cell; coisogenic; genotypically distinct; target locus; ABCB1 (MDR1); targeting oligonucleotide; CYP2D6; ss.
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                       Human CYP2D6 targeting oligo SEQ ID NO: 184.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rhemmatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV acid molecules are useful for reducing also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ65224,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                                                                                                                                                    Human, ribozyme, short interfering RNA, siRNA, HER2, K-Ras, enzymatic nucleic acid, H-Ras, N-Ras, HIV, cytostatic, anti-HIV, anti-rheumatic, cancer, AIDS, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 2 A; 8 C; 2 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                   Human K-Ras DNAzyme substrate #301.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 58; Page 90; 185pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361 GGGGAGAGTGACCAGG 376
                                                                                                                                           ABZ60189 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-MAY-2001; 2001US-0294140P.
06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-MAY-2002; 2002WO-US016840.
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| CCAGCUGUGUGACUGC 16
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                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15;
                                                                                                                                                                                                                                      21-MAR-2003
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Fosnaugh K;

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03-APR-2002; 2002WO-US010512
             (UYDE ) UNIV DELAWARE
                        WPI; 2003-371919/35.
                   Kmiec EB, Rice MC;
                                                                                                   Local Similarity
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                                                                                                                                                                           allergy; asth
substrate; ds
                                                                                                                                                                                   Unidentified
                                                                                                                                                                                              17-OCT-2002
                                       genotypes
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                                                                                                                                    ADL47940;
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The invention comprises nucleic acids (e.g. antisense oligonucleotides)
that down regulate the expression or inhibit the function of a receptor
for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
IKappaB kinase (ITKK), or protein kinase PKR. The nucleic acids of the
invention are useful for treating: cerebrovascular accident, central
nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
disease, lupus, multiple sclerosis, transplant/graft rejection,
ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
nucleic acids of the invention are also useful for down-regulating the
cypression of a target gene and as a diagnostic tool to examine genetic
drifts and mutations within diseased cells or to detect the presence of a
target RNA in a cell. The present RNA sequence represents a human IKK-Novel enzymatic nucleic acid that down-regulates expression of neurite growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or protein kinase PKR genes, for treating cancer and inflammatory disease. degenerative nervous system disease; graft versus host disease; hypersensitivity disease; infectious disease; neoplastic disease; Addison's disease; atrophic gastritis; degenerative nervous system disease; multiple sclerosis; Alzheimer's disease; hypersensitivity disease; type I hypersensitivity; Goodpasture's syndrome; type IV bypersensitivity; leprosy; infectious disease; viral infection; trype IV bypersensitivity; leprosy; infection; disease; viral infection; filaria; bacterial infection; Mycobacterium; neoplastic disease; lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer; human; T-cell associated disease; Vbeta; autoimmune disease; 0.8%; Score 14.4; DB 1; Length 17; 33.8%; Pred. No. 7e+02; ve 0; Mismatches 1; Indels Haeberli P, Mcswiggen J, Sequence 17 BP; 4 A; 4 C; 8 G; 0 T; 1 U; 0 Other; Claim 59; SEQ ID NO 1473; 317pp; English. Human Vbeta gene repeat sequence #496. BP 05-APR-2001; 2001US-00827395. 29-MAY-2001; 2001US-0294412P. 28-AUG-2001; 2001US-0315315P. 922 CIGITCCAGCIGCICC 937 93.8%; crecrecaecrecrec 1 (RIBO-) RIBOZYME PHARM INC. ADH70706 standard; DNA; 17 (first entry) gamma substrate sequence. 15; Conservative Chowrira B, WPI; 2003-058513/05. Best Local Similarity breast cancer; ds 25-MAR-2004 Blatt L, ADH70706; 16 Query Match RESULT 737 Matches g ð 0 The invention relates to a novel collection of cultured cells, comprising at least 5 genotypically distinct cells, where each of the at least 5 genotypically distinct cells, where each of the at least 5 to be statinct cells is coisogenic with respect to the others of the at least 5 genotypically distinct cells at a target locus common among them, and where each of the at least 5 genotypically distinct cells can be separately assayed. The collection of cells is useful for identifying genotypes of a target locus that alter a cellular phenotype. The collection is also useful for pharmacogenomic studies, and in studies of structure-activity relationships of existing, and of potential new, acid changes on ligand-receptor interactions. The sequences shown in ACC79391-ACC73974 represent human ABCB1 (MDR1) targeting oligos. The Novel cultured cell collection comprising at least 5 genotypically distinct cells each of which is coisogenic with respect to other cells at target locus common among them, useful for identifying target locus antisense oligonucleotide; neurite growth inhibitor; NOGO; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK; protein kinase PKR; cerebrovascular accident; central nervous system injury; CNS injury; spinal cord injury; cancer; melanoma; lymphoma; linflammatory disease; rheumatoid arthritis; restenosis; asthma; Crohn's disease; diabetes; obesity; autoimmune disease; lupus; multiple sclerosis; transplant rejection; graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis; allergy; asthma; allergic rhinitis; atopic dermatitis; Human IKK-gamma; Gaps ; 0 0.8%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 7e+02; tive 0; Mismatches 1; Indels Sequence 17 BP; 3 A; 8 C; 3 G; 3 T; 0 U; 0 Other; Human IKK-gamma substrate sequence #450. Example 2; Page 102; 112pp; English. 760 ВР 27-SEP-2002; 2002WO-US031180. 27-SEP-2001; 2001US-0325992P. ADL47940 standard; RNA; 17 745 GCCATCCGGGAAGTGT GGCATCCGGGAAGTGT 20-MAY-2004 (first entry) 15; Conservative

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US2002150891-A1.

17-0CT-2002.

Hood LE,

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simple repeat sequence (CAC) which can be used for genetic fingerprinting by blot-hybridisation of a DNA specimen. The oligonucleotide is useful in molecular biology, forensic medicine, criminology, e.g. for establishing blood relationship in family analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cellular inhibitor of apoptosis-2 phosphorothioate antisense oligo #12.
                                                                                                                                                                                                                                                                                                                                                          Collection for genome finger-printing - by using specified sequence as
                                                                                                                                                                                                                                                                                                                                                                                                                                                            This sequence represents a biotinylated-oligonucleotide containing a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Identification; genetic target; gene modulation; human; probe; antisense oligonucleotide; phosphorothioate; PCR primer; nucleotide sequence-based technology; antisense drug discovery; target validation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 18;
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93.8%; Pred. No. 7.4e+02;
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Vickers TA;
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                                                                                                                                                                                                                                     (VEKT=) VEKTOR RES PRODN ASSOC
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                                                                                                                                                          92SU-05056570
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Ohasi C, Wyatt JR,
                                                                                                                                                                                                                                                                                                                      WPI; 1998-085156/08
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                                                                                                                                                                                                                                                                               Korokhov NP,
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                                                                                                                                                          17-MAR-1992;
                                                                                                                                                                                                 17-MAR-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sclerosis and Alzheiner's disease. Hypersensitivity diseases include Type I hypersensitivities such as contact with allergens that lead to allergies. Type II hypersensitivities such as those present in Goodpasture's syndrome and Type IV hypersensitivities such as those manifested in leprosy. Infectious diseases include viral infections caused by viruses such as HIV, fungal infections such as those caused by schistosomes, filaria and bacterial infections such as those caused by Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
                                                                                                                                                                                                                                                        autoimmune, degenerative nervous system and infectious disease, comprises nucleic acid primers specifically priming and allowing amplification of a Vbeta gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     graft versus host disease, hypersensitivity diseases, infectious diseases and neoplastic diseases. Autoimmune diseases include Addison's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atrophic gastritis. Degenerative nervous system diseases include multiple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             such as leukaemias, lymphomas and cancers such as cancer of the brain, breast. The present sequence represents a Vbeta gene repeat sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a kit for diagnosing and treating T-cell associated diseases which comprises a panel of nucleic acid primers specifically priming and allowing amplification of each Vbeta gene, VbetaRNA or CDNA. The kit is useful for diagnosing organ transplant rejection and diagnosing and treating T-cell associated diseases including autoimmune diseases, degenerative nervous system diseases.
                                                                                                                                                                                                                                         Kit for diagnozing and treating T-cell associated diseases e.g.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'note= "repeated 2-8 times"
                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 900; 164pp; English
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note= "biotinylated"
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                                       94US-00309335.
  99US-00263959
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  05-MAR-1999;
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Brooks DG;

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Antisense compounds complementary to Cellular Inhibitor of Apoptosis-2 useful for e.g. diagnostics, therapeutics, and as research reagents.
                                                                                                                                                                                                                                                        Bennett CF, Cowsert LM, Ackermann EJ;
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                                                                                                                                                                                                                                                                WPI; 1999-561046/47.
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Claim 3; Col 39; 33pp; English

98US-00205144. 98US-00205144

.; 0 A method has been developed of defining a set of compounds that modulate the expression of a target nucleic acid (tNA) sequence via binding of the compounds with the tNA sequence. The method comprises generating a library of virtual compounds in silico according to defined criteria, and according to defined criteria. Also described are: (1) a method of defining as to follopuncleotides (ONS) that modulate the expression of a tNA sequence via binding of the ONS with the tNA sequence via binding of the ONS with the tNA sequence comprising generating a library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual ONS with the tNA according to defined criteria; and (2) a method of defining a set of compounds that modulate the expression of a tNA sequence via binding of the compounds with the tNA. The methods can be used for the generation provide compounds having defined physical, chemical or bioactive properties, e.g. antisense activity. and identification of synthetic compounds having defined physical, chemical or bioactive properties. Information gathered from assays of such compounds is used to identify nucleic acid sequences that are tractable to a variety of nucleotide sequence-based technologies, e.g. antisense drug discovery and target validation. AAZ40852 to AAZ41220, and AAX52701 to AAX52706, represent sequences used in the exemplification of the present invention Cellular Inhibitor of Apoptosis-2; antisense; diagnostic; therapeutic; c-IAP-2; prophylaxis; infection; inflammation; tumor formation; ss. Gaps ; 0 0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels Human c-IAP-2 mRNA inhibiting antisense oligo ISIS #23423. Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other; Example 21; Page 100; 264pp; English. 513 CCTGGAGAGCTGACC 528 AAZ22114 standard; DNA; 18 (first entry) ccredadadaridacc Conservative Local Similarity nes 15; Conserv Homo sapiens 26-NOV-1999 JS5958771-A. Synthetic AAZ22114; 16 Query Match

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ7744 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
            The invention provides antisense compounds of 8-30 nucleotides that inhibit the expression of human Cellular Inhibitor of Apoptosis-2 (c-IAP-2). The antisense compounds may be used for diagnostics, therapeutics (for modulating the expression of c-IAP-2), prophylaxis (e.g. to prevent or delay infection, inflammation, or tumor formation), as research and in kits. Sequences AAZ210-142 represent phosphorothicate alignment of a biological pathway) end in kits. Sequences AAZ210-142 represent phosphorothicate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human genome; biallelic marker; high density disequilibrium map; genomic map; haplotype; phymorphic base; genotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer; amplification; single nucleotide polymorphism; SNP; PCR primer;
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                                                                                                                                                                                                                                                Length 18;
                                                                                                                                                                                                                                                                                      1; Indels
                                                                                                                                                                                                              Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                0.8%; Score 14.4; DB 1;
13.8%; Pred. No. 7.4e+02;
.ve 0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                               528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ70710 standard; DNA; 18 BP
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98US-0109732P.
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Best Local Similarity 93.8<sup>3</sup>
Matches 15, Conservative
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The present invention relates to an antisense compound of up to 30 mucleobases in length, which specifically hybridises with and inhibits the expression of human steroid receptor coactivator-1 (SRC-1) (also known as F-SRC-1 and NcoA-1) gene. The antisense compounds are useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The antisense oligomucleocides are useful for treating an animal, particularly a human, suspected of having or being prone to a disease or condition associated with the expression of SRC-1. In particular, the antisense oligomucleotides are useful for preventing, delaying or treating infection, inflammation or tumour formation. The present sequence is an antisense oligomucleotide, ISIS# 29895, targetted to human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       involving taking a DNA-containing sample from an organism or cell culture that has been treated with a test compound and determining any changes in the DNA methylation status or pattern caused by said test compound. The method is used for diagnosis and proponeis of adverse toxic responses in individuals. The present sequence is a PCR primer used to demonstrate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Toxicological diagnosis, useful for diagnosis and prognosis of adverse reactions, based on effect of test compounds on methylation status of selected genes, involves determining changes in DNA methylation status.
                                   New antisense oligonucleotides for inhibiting the expression of human steroid receptor coactivator-1, particularly useful for preventing, delaying or treating infection, inflammation or tumor formation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a method of toxicological diagnosis,
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                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.4e+02;
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                                                                                                           Claim 3; Col 43; 36pp; English.
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WPI; 2001-638016/73.
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                Human; antisense; steroid receptor coactivator-1; SRC-1; F-SRC-1; NcoA-1; diagnostic; therapeutic; prophylaxis; infection; inflammation; cytostatic; tumour formation; antiinflammatory; antibacterial;
   not actually given a sequence in the Sequence Listing from the
                                                                                                                              Gaps
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                                                                                       0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                Antisense oligo, ISIS# 29895, targetted to human SRC-1 DNA
                                                                                                                            Indels
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                                                       5 T; 0 U; 0 Other
                                                                                                                            0; Mismatches
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mod_base= OTHER
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'mod_base= m5c
                                                                                                                                                               871 TACCTGGATGACTGTG 886
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                                                     Sequence 18 BP; 5 A; 4 C; 4
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/mod_base=
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/mod_base= 1
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                                                                                                                              Conservative
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                                                                                                           Local Similarity
                  present invention
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modified_base
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AAD20371
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Matches
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Page 375

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The invention relates to a nucleic acid comprising a sequence (I) of at least 18 bases in length of a segment of chemically pre-treated genomic DNA which has any one of the sequences of (ABX33919-ABX3402) or its complement. Also included are an oligonuclectide or peptide nucleic acid (or set thereof) of at least 9 nucleotides which hybridises to (I), probes for detecting cytosine methylation or singlenuclectide polymorphisms (SNP) in (I), an array of oligomers or peptide nucleic acids for analysing diseases associated with the methylation or states of the CpG dinucleotides of (I). The array is useful for cherming genetic and/or epigenetic parameters, classification, differentiation, grading, staging, treatment and/or diagnosis of astrocytomas, or the predisposition to astrocytomas by analysing cytosine methylations, involves obtaining a biological sample containing genomic CC NNA, extracting the genomic DNA, converting cytosine bases which are unmethylated at the 5-position, in the genomic DNA sample, to uracil or another base which is dissimilar to cytosine in terms of hypridisation chenviour, by chemical treatment and amplifying chemically pre-treated containing methylation status of one or more cytosine positions, and analysing methylation status of the cytosine positions by reference to one or more data sets. The genomic DNA is chemically treated by using a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, ss; astrocytoma, cytostatic; staging; cysteine methylation; CpG; bisulphite; brain tissue; MALDI; ESI; electron spray mass. spectrometry; matrix assisted laser desorption/ionization mass spectrometry; primer.
                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel chemically modified genomic DNA sequences, useful in the characterization, classification, differentiation, grading, staging, treatment and/or diagnosis of astrocytomas or predisposition to
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0
                                                                                Length 18;
                                                                                                                           1; Indels
                                         Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                / Match 0.8%; Score 14.4; DB 1; Local Similarity 93.8%; Pred. No. 7.4e+02; nes 15; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Berlin K;
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                                                                                                                                                                  774 CCTCAAACACGCCAAC 789
                                                                                                                                                                                                                                                                                                                 ABK34171 standard; DNA; 18 BP
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01-SEP-2000; 2000DE-01043826.
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                                                                                                                                                                                                         16 CCTCAAACACCCCAAC 1
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method of the invention
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                                                                                  Query Match
                                                                                                                           Matches
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bisulphite, hydrogen sulphite or disulphite. The amplification step

amplifies DNA which is of particular interest in astrocytoma or brain

tissue, based on the specific genomic methylation status of brain

tissues, as opposed to background DNA. The amplificates carry a

fluorescent label or radionuclide. Optionally, the labels of the

amplificates are detachable molecule fragments having a typical mass

which are detected in a mass spectrometer. The fragments of chemically

pre-treated genomic DNA to be amplified, have a single positive or

congative charge for a better detectability in the mass spectrometer.

Preferably, the amplificates or fragments of the amplificates are

detected by matrix assisted laser description/ionization mass spectrometry

(MALDI) or using electron spray mass spectrometry (ESI). The present

sequence is a PCR primer used to amplify a region containing a methylated

cytosine from one of the chemically pre-treated reference DNA samples of

the invention. Note: The sequence data for this patent did not form part

of the primed specification, but was obtained in electronic format
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      least 18 bases of a segment of chemically pretreated genomic DNA (II) according to one of the sequences (S1) selected from 120 sequences, and its complementary sequences. Also included are an oligomer (III), especially an oligonucleotide or peptide nucleic acid (PNA)-oligomer, comprising a sequence of at least 9 nucleotides which hybridises to or is identical to (II), and complementary sequences, a set of oligomers (IV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, 88; astrocytoma; oligoastrocytoma; oligodendroglioma; antitumour; cytostatic; cytosine methylation state; single nucleotide polymorphism; SNP; CpG; brain tumour; PCR; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oligonucleotide for diagnosing and treating tumors and cancer especially gliomas, astrocytomas and oligodendromas, comprises chemically modified genomic sequences of genes associated with tumors and cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to a nucleic acid (I) comprising a sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
                                                                                                                                                                                                                                                                                                                                                        directly from WIPO at ftp.wipo.int/pub/published pct sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                         0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                   Seguence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human UNG methylation state PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 4; Page 23; 31pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABK28109 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-JUL-2001; 2001WO-EP007539.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JUN-2000; 2000DE-01032529.
01-SEP-2000; 2000DE-01043826.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 ccrcaaacaccccaac 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 774 CCTCAAACACGCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (EPIG-) EPIGENOMICS AG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-JAN-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABK28109;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 745
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ABZ10908;
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                               (ISIS-)
(BAYU)
                                                                                                                                                                                                                                                                                                                                                                           RESULT 747
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                                                                                                                                                                                                                                                                                                                                                                                      ABZ10908
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comprising at least two (III) and their use for detecting the cytosine methylation state and/or single nucleotide polymorphisms (SNPs) in (II), and manufacturing (MI) an arrangement of different oligomers (array) fixed to a carrier material for analysing diseases associated with the methylation state of the CDG dinucleotide of (SI), where at least one oligomer is coupled to solid phase. The set of oligomers (IV) are useful as primer oligomicleotides for the amplification of (II) especially for characterising classifying and differentiating oligodendroglioma, astrocytoma and oligoastrocytoma tumours (by ascertaining genetic and/or apprenenters of genomic DNA by analysing cytosine methylation and single nucleotide polymorphisms). The present sequence is a PCR primer used to amplify the modified genomic sequence from a gene
                                                                                                                                                                                                                                                                                                                                    Human; steroid receptor coactivator-1; SRC-1; antisense compound; diagnostic; therapeutic; prophylaxis; antisense therapy; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                           .
0
                                                                                                                                                       0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.48+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                             *tag= b
/mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                            'note= "Phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                     Human SRC-1 antisense oligonucleotide, ISIS 29855.
                                                                                                                                      Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      *tag= c
'mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                   mod_base= OTHER
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'mod_base= m5c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mod_base= m5c.5..18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mod_base= m5c
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/mod_base= m5c
                                                                                                                                                                                             774 CCTCAAACACGCCAAC 789
                                                                                                                                                                                                                                                              BP.
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                                                                                                                                                                                                                                                              AAD41922 standard; DNA; 18
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                                                                                                                                                                                                               CCTCAAACACCCCAAC
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                                                                                                                                                                           Conservative
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                                                                                                                                                                Local Similarity
les 15; Conserv
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
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                                                                                                                                                          Query Match
                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                           RESULT 746
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The invention relates to antisense compounds, compositions and methods for modulating the expression of human steroid receptor coactivator-1 (SRC-1). The compositions comprise antisense oligonucleotides targetted to nucleic acids encoding SRC-1. The antisense compound is useful for inhibiting the expression of SRC-1 in human cells or tissues. It is also useful for treating a human having a disease or condition associated with SRC-1, by inhibiting expression of SRC-1. It is also useful for it is also useful in antisense therapy. The present sequence is an antisense oligonucleotide targetted to human SRC-1 DNA. This sequence is used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Haematopoietic cell proliferation disorder related oligonucleotide #1048.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                   Novel antisense compound targeted to nucleic acid molecules encoding human steroid receptor coactivator-1 (SRC-1), useful for inhibiting expression of SRC-1 in human cells or tissues.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; haematopoietic cell proliferation disorder; cytostatic; gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia; cytosine methylation state; probe; primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.4e+02;
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                                                                                                                                                                       Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 15; Page 79; 103pp; English
                                                                ISIS PHARM INC.
BAYLOR COLLEGE MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        152 AGCTGTCAATGACACT 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAR-2002; 2002WO-EP003401.
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27-NOV-2000; 2000US-00723379.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABZ10908 standard; DNA; 18
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                                                                                                                                                                       Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 93.8
ses 15; Conservative
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                                                                                                                                                                                                                                       WPI; 2002-537447/57
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                                                                                                                                                                       O'malley BW,
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The present invention describes a method for detecting and differentiating between haematopoietic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a subject. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least 1 reagent, which distinguishes between methylated and non-methylated Cpg dinucleotides within the target nucleic acid. ABZ09861 to ABZ1118 represent specifically claimed nucleotide sequences from the present invention. Oligonucleotides from the present invention can be used: for differentiating between healthy haematopoietic cells and proliferative disorder haematopoietic cells; for differentiating between acute of some methylation state and/or single nucleotide celeranting the cytosine methylation state and/or single nucleotide complements; and as primers for the cytosine methylation state and/or single nucleotide coll proliferation disorder related sequences and their complements; and as primers for the cytosine methylatic cell proliferation disorder related sequences and their complements; and as primers for the cytosine methylation state and/or single nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation between cytosic cell proliferative disorders. The present cell proliferative coll proliferative cell entertice cell proliferative cell proliferative cell proliferative cell proliferative ce disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides. proliferative Detecting and differentiating between hematopoietic cell Claim 15; Page 69; 117pp; English 

Seguence 18 BP; 1 A; 0 C; 10 G; 7 T; 0 U; 0 Other;

Length 18; 1; Indels Query Match 0.8%; Score 14.4; DB 1; Best Local Similarity 93.8%; Pred. No. 7.4e+02; Matches 15; Conservative 0; Mismatches 1; 240 18 225 TGAGAGTGGTGGTGGT 3 reaccercercercer ઠ g

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Gaps . 0

> ADA20557 standard; DNA; 18 BP 20-NOV-2003 (first entry) ADA20557;

Prostate tumour related gene UBB PCR primer #2.

cytostatic; gene therapy, genetic marker; epigenetic parameter; classification; differentiation; diagnosis; prostate tumour; prostate cancer; cytosine methylation; uracil; single nucleotide polymorphism; SNP; prostate carcinoma; ss; primer; PCR.

Homo sapiens

WO2002103042-A2

27-DEC-2002

14-JUN-2001; 2001DE-01028508

14-JUN-2002; 2002WO-EP006605

(EPIG-) EPIGENOMICS AG

Adorjan P; Distler J,

WPI; 2003-167536/16.

Determining genetic and/or epigenetic parameters, useful for the classification, differentiation and/or diagnosis of prostate tumors or a

The invention relates to a novel method for characterising, classifying and/or differentiating renal and prostate cancer. The method comprises extracting genomic DNA from a biological sample, converting cytosine bases (by chemical treatment) that are unmethylated at the 5-position to

Example 2; Page 19; 211pp; English.

ö The invention relates to a method of determining genetic and/or diagnostic parameters for the classification, differentiation and/or diagnosts of prostate tumours or the predisposition to prostate cancer, by analysing cytosine methylation in a sample of genomic DNA. The method comprises chemically treating unmethylated cytosine bases at the 5-position to uracil or another base, which is dissimilar to cytosine in terms of hybridization behaviour; followed by amplifying at least one firagment of the chemically pre-treated genomic DNA using sets of primer oligomacleotides and a polymerase. The oligomers or probes derived from them are useful for detecting the methylation state of all CpG dinucleotides and/or single nucleotide polymorphisms (SNPS) in a renal cancer; prostate cancer; cytosine methylation; single nucleotide polymorphism; histological; cytological; ss; primer; chemically pre-traated genomic DNA. They are all useful for treating prostate carcinoma. This sequence represents an oligonucleotide used tamplify a gene possibly involved in predisposition to prostate cancer Gaps predisposition to prostate cancer, comprises analyzing cytosine which may contain methylated or unmethylated CpG dinucleotides · 0 0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.4e+02; tive 0; Mismatches 1; Indels Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other; Example 2; Page 19; 376pp; English 774 CCTCAAACACGCCAAC 789 ВР 16 cerchadeacecedae 1 ADA84360 standard; DNA; 18 (first entry) Conservative Human UNG PCR primer 1. Local Similarity es 15; Conserv WO2002103041-A2. Homo sapiens. methylation. 20-NOV-2003 ADA84360; Query Match RESULT 749 Matches ADA84360/ ò

prostate cancers, by analyzing the genetic and/or epigenetic parameters of genomic DNA, particularly by determining its cytosine methylation status. Method for characterizing, classifying and/or differentiating renal and Distler J, Model F, Adorjan P; 14-JUN-2002; 2002WO-EP006603. 14-JUN-2001; 2001DE-01028509. (EPIG-) EPIGENOMICS AG WPI; 2003-183991/18. 27-DEC-2002.  hyperglycemia or hypocalcaemia; for treating obesity, impaired glucose

Type 2 diabetes,

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                                                                  particularly for characterising, classifying and/or differentiating renal and prostate cancers. The oligomers are useful as primer oligomucleotides for the amplification of any of the 112 DNA sequences of the invention. The set of oligomer probes is useful for detecting the cytosine methylation state and/or single nucleotide polymorphisms in any of the 112 chemically pretreated genomic DNA sequences. The method is also useful for identifying the tissue of origin of cancer cells. The method allows the classification, differentiation and/or diagnosis of cancer tissues using minute samples which would be inadequate for histological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Composition useful for altering gluconeogenesis or glucose production in
the treatment of e.g. insulin resistance or cardiovascular disease
comprises an agent which modulates short heterodimer partner expression
uracil or another base, and amplifying at least one fragment of the chemically pretreated genomic DNA using sets of primer oligonacleotides and a polymerase. The method is useful for detecting the cytosine methylation state and/or single nucleotide polymorphisms in genomic DNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             short heterodimer partner; Zucker; diabetic; fatty, rat; ZDF; insulin; gluconeogenesis; glucose production; hyperglycemia; hypocalcaemia; obesity; glucose tolerance; insulin resistance; metabolic syndrome X; Type 2; diabetes; Type 1; cardiovascular disease; ss.
                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                amplify; PCR; PEPCK; phosphoenolpyruvate carboxykinase; SHP;
                                                                                                                                                                                                                                                                                                                                                            .;
0
                                                                                                                                                                                                                                or cytological analysis. The present sequence is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                      0.8%; Score 14.4; DB 1; Length 18; larity 93.8%; Pred. No. 7.4e+02; Conservative 0; Migmatches
                                                                                                                                                                                                                                                                                       Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
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                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 750
                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABQ80440,
   qq
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The sequences given in ABQ80440-45 are primers and probes which were used to determine PERPCK (phosphoenolpyruvate carboxykinase) and SHP (short heterodimer partner) expression in Zucker diabetic fatty (ZDF) fa/fa ratt treated with insulin. The composition of the invention for alteration of allocomeogenesis or glucose production comprises an agent which modulates SHP expression or activity. The composition is used for altering gluconeogenesis or production of glucose useful for treating

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0;
                               inhibits or decreases expression or activity of SHP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "Phosphorothioate backbone; All cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to antisense compounds targetted to a nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human, antisense, cellular inhibitor of apoptosis-2; c-IAP-2; cancer; hyperproliferative condition; apoptosis inhibitor 2; autoimmune disease; API-1; hIAP-1; MIHC; gene therapy; phosphorothioate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
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                                                                                                                                                                                                                                              Gaps
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/mod_base= OTHER
/note= "2'-methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                       Length 18;
                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human c-IAP-2 antisense oligonucleotide #ISIS #23463.
                      tolerance, insulin resistance, metabolic syndrome X, Type 1 diabetes, or cardiovascular disease. The agent
                                                                                                                                 Sequence 18 BP; 5 A; 0 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mod_base= OTHER
/note= "2'-methoxyethyl (2'-MOE)
15..18
                                                                                                                                                                                     Score 14.4; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
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                                                                                                                                                                                                                                                                                                  1481 TCCACAAACTTCCTGA 1496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-OCT-2001; 2001US-00857299.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-JUL-2002; 2002US-00197290.
                                                                                                                                                                                             0.8%;
                                                                                                                                                                                                                 93.88;
                                                                                                                                                                                                                                                                                                                                                     16 recacaacricerca 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAD60490 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ø
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                                                                                                                                                                                                                                              15; Conservative
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*tag=
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(ACKE/) ACKERMANN E J.
(COWS/) COWSERT L M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-755119/71.
                                                                                                                                                                                          Query Match
Best Local Similarity
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-DEC-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 751
                                                                                                                                                                                                                                                 Matches
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Gaps

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1; Indels

Score 14.4; DB 1; Pred. No. 7.4e+02; 0; Mismatches 1;

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93.8%;

Query Match 0.8 Best Local Similarity 93.8 Matches 15; Conservative

615 CTACATTAAGCTGGAC 630

CTACATTAAGCAGGAC 2

17

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encoding human cellular inhibitor of apoptosis-2 (also known as c-IAP-2, apoptosis inhibitor 2, API-1, hIAP-1 and MIHC) to inhibit its expression. Antisense compounds of the invention are used to induce apoptosis in
                                  human cells or tissues to treat diseases or conditions associated with insufficient apoptosis. They are used to treat diseases or conditions associated with cancer or autoimmune diseases. The invention is also useful in antisense gene therapy. The present sequence is an antisense oligonucleotide targetted to human c-IAP-2 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kit for determining haplotype of chum salmon, has substrate with
immobilized oligonucleotides that detect polymorphisms in mitochondrial
DNA control region of chum salmon, by hybridization with chum salmon
                                                                                                                                                                                Gaps
                                                                                                                                                                                .;
0
                                                                                                                                                     0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.4e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Abe S;
                                                                                                                             Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                 chum salmon; haplotype; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Urano A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; SEQ ID NO 67; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Suzuki O,
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ADJ58324 standard; DNA; 18 BP
                                                                                                                                                                                                        513 CCTGGAGAGCTGACC 528
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-DEC-2001; 2001JP-00379926
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                                                                                                                                                                                                                                                                                                                                                                          Primer of the invention #3
                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (NISN ) NISSHINBO IND INC
                                                                                                                                                                Local Similarity 93.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Moriya S, Ichihara T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-629114/60.
                                                                                                                                                                                                                                                                                                                                                                                                   polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nucleic acid.
                                                                                                                                                                                                                                                                                                                                                06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                    EP1319721-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                       ADJ58324;
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                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                       RESULT 752
                                                                                                                                                                                Matches
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Addison's disease, arrophic gastrilis, degenerative nervous system disease; multiple sclerosis; degenerative nervous system disease; multiple sclerosis; Allaheimer's disease; hypersensitivity doodpasture's syndrome; type II hypersensitivity; Goodpasture's syndrome; type II hypersensitivity; leprosy; infections disease; viral infection; HIV; fungal infection, Candida; parasitic infection; schistosome; filaria; bacterial infection; Mycobacterium; neoplastic disease; lymphoproliferative disease; leukaemia; lymphoma; cancer; brain cancer;

breast cancer; ds

US2002150891-A1. Homo sapiens.

05-MAR-1999; 19-SEP-1994; 19-SEP-1995;

17-OCT-2002

94US-00309335. 95US-00531241. 99US-00263959.

LE. ROWEN L.

(HOOD/) HOOD (ROWE/) ROWEN

degenerative nervous system disease; graft versus host disease; hypersensitivity disease; infectious disease; neoplastic disease;

human; T-cell associated disease; Vbeta; autoimmune disease;

Human Vbeta gene repeat sequence #517.

(first entry)

25-MAR-2004

ADH70727;

0

BP

ADH70727 standard; DNA; 18

RESULT 753

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The invention relates to a kit for diagnosing and treating T-cell associated diseases which comprises a panel of nucleic acid primers specifically priming and allowing amplification of each Vbeta gene, betaRNA or CDNA. The kit is useful for diagnosing organ transplant rejection and diagnosing and treating T-cell associated diseases. Columnum diseases, degenerative nervous system diseases, including autoimmune diseases, Autoimmune diseases include Addison's disease, and neoplastic diseases. Autoimmune diseases include Addison's disease, arcophic gastritis. Degenerative nervous system diseases include multiple sclenosis and Alzheiner's disease. Hypersensitivity diseases include Type arcophic gastrities such as contact with allergens that lead to allergies, Type II hypersensitivities such as those present in Goodpasture's syndrome and Type IV hypersensitivities and as those caused by viruses such as HIV, fungal infections and as those caused by the yeast genus Candida, parasitic infections such as those caused by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           autoimmune, degenerative nervous system and infectious disease, comprises nucleic acid primers specifically priming and allowing amplification of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kit for diagnozing and treating T-cell associated diseases e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; SEQ ID NO 921; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-059052/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rowen L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wbeta gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hood LE,
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The present invention relates to a kit for determining haplotype of Oncorhynchus keta, comprising oligonucleotide-immobilized substrate obtained by immobilizing, on substrate, one or more kinds of oligonucleotides that enable detection of polymorphism in a nucleotide sequence of mitochondrial DNA control region of chum salmon, by hybridization, and determining haplotype based on polymorphism or combination of polymorphisms. The oligonucleotides are useful for determining a haplotype of chum salmon by hybridizing a nucleic acid derived from the chum salmon with each oligonucleotide contained in the kit, detecting the presence or absence of formation of a hybrid of each oligonucleotide and the nucleic acid derived from the chum salmon and identifying a polymorphism in the nucleotide sequence of the chum salmon mit chondrial DNA control region. The present sequence represents a

Sequence 18 BP; 4 A; 3 C; 4 G; 7 T; 0 U; 0 Other;

primer of the invention.

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material for the label of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Frazer IH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                AD026656;
                                                                                                                                                                                                                                                    RESULT 755
                                                                                                                    Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention describes a molecule (M) for labelling a target material, comprising a conjugate of a transition metal compound with a detectable group, the conjugate having the general structural Formula (I), its tautomers, salts, and acids. (M) is useful for detecting a target material, for imparting a detectable property to a target material, for monitoring a reaction, for isolating a target material, for monitoring a reaction, for isolating a target material of interest, and for detecting one or more molecules that include a target sequence. The two transition metal chelates are useful for labelling, detecting, and analysing target materials containing oligohistidine target. (M) binds with high affinity and specificity to oligohistidine target sequences, particularly hexahistidine target sequence encodes an oligohistidine suitable as a target
  schistosomes, filaria and bacterial infections such as those caused by Mycobacterium. Neoplastic diseases include lymphoproliferative diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Molecule useful for labeling target material, for detecting target material and for imparting detectable properties to target material, comprises conjugate of transition metal compound with detectable group.
                                      such as leukaemias, lymphomas and cancers such as cancer of the brain, breast. The present sequence represents a Vbeta gene repeat sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Labeling molecule associated oligohistidine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      labelling molecule, conjugate, transition metal compound;
detectable group, labelling; detection; hexahistidine target sequence,
                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Labelling molecule associated oligohistidine target molecule DNA
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0
                                                                                                                                  Query Match 0.8%; Score 14.4; DB 1; Length 18; Best Local Similarity 93.8%; Pred. No. 7.46+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                Sequence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /partial
/note= "No start or stop codon"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 3; Page 20; 41pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 target molecule"
                                                                                                                                                                                                                230 GTGGTGGTGGTGGCGG 245
                                                                                                                                                                                                                                                                                                                                ADO49036/c
ID ADO49036 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-2003; 2003US-00665227.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag= a
/product=
                                                                                                                                                                                                                                                                                                                                                                                                                          12-AUG-2004 (first entry)
                                                                                                                                                                                                                                                      GTGGTGGTGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ebright YW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2004-447681/42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              oligohistidine; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004096887-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes a method for constructing a synthetic polynucleotide from which a polypeptide is producible to confer a selected bhenotype to an organism of interest or part in a different quality than that conferred by a parent polynucleotide that encodes the same polypeptide. The method comprises: (a) selecting a first codon of the parent polynucleotide for replacement with a synonymous codon, where the synonymous codon is selected on the basis that it exhibits a different phenotypic preference than the first codon in a comparison of phenotypic preference than the first codon in a comparison of phenotypic preference than the first species as the organism of interest and organisms that are related to the organisms of interest; and (b) replacing the first codon with the synonymous codon to construct the synthetic polynucleotide. Also described: (1) a method for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       determining the phenotypic preference of a first codon in an organism of interest or its parts; (2) a synthetic polynucleotide constructed from the method above; (3) an organism or interest or part containing a synthetic polynucleotide constructed from the method above; (4) an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Constructing synthetic polynucleotide for modulating the quality of a selected phenotype displayed by an organism comprises replacing a first codon with a synonymous codon to construct the synthetic polynucleotide.
                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          phenotype; phenotypic preference; phenotype modulation; leader; ds.
                                                                                                                                                                                     ô
                                                                                   Score 14.4; DB 1; Length 18; Pred. No. 7.4e+02;
                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic leader sequence encoding DNA SEQ ID NO:49.
Sequence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; SEQ ID NO 49; 86pp; English.
                                                                                                                                                                                                                                                                                   230 GTGGTGGTGGTGCGG 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADO26656 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-NOV-2002; 2002US-0425163P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-NOV-2003; 2003WO-AU001487
                                                                                             Query Match 0.8%;
Best Local Similarity 93.8%;
                                                                                                                                                                                                                                                                                                                                                                           18 dredredredred 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                          15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UYQU ) UNIV QUEENSLAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-411519/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P-PSDB; ADO26657
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10017621-381.rng

Page 381

encodes the polypeptide; (6) a method of enhancing the quality of a selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polymucleotide that encodes the polypeptide; and (7) a method of reducing the quality of a selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polymucleotide that encodes the polypeptide. The method is useful for constructing a sprintetic polymucleotide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different quality than that conferred by a parent polymucleotide that encodes the same polypeptide. It is useful for modulating the quality of a selected same polypeptide. It is useful for modulating the quality of a selected phenotype displayed by an organism or part. The present sequence encodes a synthetic leader sequence, which is used in an example from the present invention. 

Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;

Gaps .. 0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.4e+02; 1; Indels 0; Mismatches 245 230 GTGGTGGTGGCGG Conservative Similarity 15; Query Match Best Local 6 Matches

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2 Greeregreereg 17

ADO26694 standard; DNA; 18 BP AD026694; RESULT 756 AD026694/c 

12-AUG-2004 (first entry)

Synthetic leader sequence encoding DNA SEQ ID NO:87.

phenotype; phenotypic preference; phenotype modulation; leader; ds.

Synthetic.

WO2004042059-A1.

21-MAY-2004

10-NOV-2003; 2003WO-AU001487.

08-NOV-2002; 2002US-0425163P.

(UYQU ) UNIV QUEENSLAND

Frazer IH;

WPI; 2004-411519/38. P-PSDB; ADO26695.

Constructing synthetic polynucleotide for modulating the quality of a selected phenotype displayed by an organism comprises replacing a first codon with a synonymous codon to construct the synthetic polynucleotide.

Example 1; SEQ ID NO 87; 86pp; English.

The present invention describes a method for constructing a synthetic polynucleotide from which a polypeptide is producible to confer a pelected phenotype to an organism of interest or part in a different quality than that conferred by a parent polynucleotide that encodes the same polypeptide. The method comprises: (a) selecting a first codon of the parent polynucleotide for replacement with a synonymous codon, where the synonymous codon is selected on the basis that it exhibits a different phenotypic preference than the first codon in a comparison of phenotypic preference than the first codon in a comparison of phenotypic preference than the first codon in a comparison of organism are selected from organisms of the same species as the organism of interest and organisms that are related to the organisms of interest; and (b) replacing the first codon with the synonymous codon to construct

Sequence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other;

0 Gaps 0 0.8%; Score 14.4; DB 1; Length 18; 33.8%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels 1; Indels ٥; 93.8%; Conservative Local Similarity 15; Query Match Matches

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ADO26714 standard; DNA; 18 BP. RESULT 757 AD026714/

(first entry) 12-AUG-2004 ADO26714; 

Synthetic leader sequence encoding DNA SEQ ID NO:107.

phenotype; phenotypic preference; phenotype modulation; leader; ds.

Synthetic.

WO2004042059-A1.

21-MAY-2004.

.0-NOV-2003; 2003WO-AU001487.

08-NOV-2002; 2002US-0425163P.

(UYQU ) UNIV QUEENSLAND.

Frazer IH;

WPI; 2004-411519/38.

P-PSDB; ADO26715.

Constructing synthetic polynucleotide for modulating the quality of a selected phenotype displayed by an organism comprises replacing a first codon with a synonymous codon to construct the synthetic polynucleotide.

Example 1; SEQ ID NO 107; 86pp; English

the synonymous codon is selected on the basis that it exhibits a different phenotypic preference than the first codon in a comparison of phenotypic preference than the first codon in a comparison of phenotypic preferences in test organisms or parts, where the test organism are selected from organisms of the same species as the organism corganisms that are related to the organisms of interest; and (b) replacing the first codon with the synonymous codon to construct the synthetic polymucleotide. Also described: (1) a method for determining the phenotypic preference of a first codon in an organism of interest or its parts; (2) a synthetic polymucleotide constructed from the method above; (3) an organism or interest or part containing a synthetic polymucleotide constructed from the method above; (4) an organism or interest or part containing a synthetic construct that comparises a regulatory polymucleotide operably linked to a tandem repeat or a first codon fused in frame with a reporter polymucleotide that comparises a regulatory polymucleotide operably linked to a tandem repeat of a first codon fused in frame with a reporter polymucleotide that comparise a regulatory polymucleotide operably linked to a tandem repeat of a first codon fused in frame with a reporter polymucleotide that concodes the polymetrie is displayed by an organism of interest or part and that results from the expression of a parent polymucleotide that encodes the polypeptide; and (7) a method of reducing the quality of a concodes the polypeptide; and (7) a method of reducing the quality of a concodes the polypeptide; and (7) a method of reducing the quality of a concodes the polypeptide; and (7) a method of reducing the quality of a concodes the polypeptide in the expression of a parent polymucleotide that and that results from the expression of a parent polymucleotide that and chall that it is a displayed by an organism of interest or part encodes the polypeptide in the method is useful for constructing a salected phenotype man and part of an phenotype displayed by an organism or part. The present sequence encodes a synthetic leader sequence, which is used in an example from the present quality than that conferred by a parent polynuclectide that encodes the same polypeptide. The method comprises: (a) selecting a first codon of the parent polynuclectide for replacement with a synonymous codon, where quality than that conferred by a parent polynucleotide that encodes the same polypeptide. It is useful for modulating the quality of a selected selected phenotype to an organism of interest or part in a different present invention describes a method for constructing a synthetic polymucleotide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different

; 0.8%; Score 14.4; DB 1; Length 18; 93.8%; Pred. No. 7.46+02; tive 0; Mismatches 1; Indels Seguence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other; 230 GTGGTGGTGGTGGCGG 245 15; Conservative Best Local Similarity Query Match Matches à

; 0

Gaps

AD026658 standard; DNA; 18 BP. greereereeree 2 (first entry) 12-AUG-2004 17 ADO26658; RESULT 

Synthetic leader sequence encoding DNA SEQ ID NO:51.

phenotype; phenotypic preference; phenotype modulation; leader; ds.

Synthetic.

WO2004042059-A1.

21-MAY-2004.

10-NOV-2003; 2003WO-AU001487.

08-NOV-2002; 2002US-0425163P.

outside the presence than the sings codon in a comparison of phenotypic preference than the lifest codon in a comparison of phenotypic preference in test organisms or parts, where the test organism are selected from organisms of the same species as the organism of interest and organisms that are related to the organisms of interest; and (b) replacing the first codon with the synchonymous codon to construct the synthetic polymucleotide. Also described: (1) a method for chermining the phenotypic preference of a first codon in an organism of the method above; (3) an organism or interest or part containing a synthetic polymucleotide constructed from the method above; (3) an organism or interest or part containing a synthetic construct that comprises a regulatory polymucleotide operably linked to a tandem repeat of a first codon fused in frame with a reporter polymucleotide that comprises a regulatory polymucleotide operably linked to a tandem repeat of a first codon fused in frame with a reporter polymucleotide that comprises a reporter protein, which produces, or is predicted to produce a selected phenotype or a phenotype of the same class as the selected phenotype that is displayed by an organism of interest or part and that results from the expression of a parent polymucleotide that encodes the polypeptide; (6) a method of enhancing the quality of a selected phenotype that is displayed by an organism of interest or part encodes the polypeptide; and (7) a method of reducing the quality of a selected phenotype that is displayed by an organism of interest or part encodes the polypeptide; and (7) a method of reducing the quality of a selected phenotype to an organism of a parent polymucleotide that encodes the polypeptide from the expression of a parent polymucleotide that encodes the polypeptide from the expression of a parent polymucleotide from the expression of a parent polymucleotide that a selected phenotype to an organism of interest or part in a selected phenotype to an organism of interest or part in the or The present invention describes a method for constructing a synthetic polynucleotide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different quality than that conferred by a parent polynucleotide that encodes the same polypeptide. The method comprises: (a) selecting a first codon of the parent polynucleotide for replacement with a synonymous codon, where the synonymous codon is selected on the basis that it exhibits a different phenotypic preference than the first codon in a comparison of phenotype displayed by an organism or part. The present sequence encodes a synthetic leader sequence, which is used in an example from the present selected phenotype displayed by an organism comprises replacing a first codon with a synonymous codon to construct the synthetic polynucleotide. synthetic polynucleotide for modulating the quality of a Example 1; SEQ ID NO 51; 86pp; English. (UYQU ) UNIV QUEENSLAND WPI; 2004-411519/38 P-PSDB; ADO26659 Constructing Frazer IH; 

0.8%; Score 14.4; DB 1; Length 18; 13.8%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels Sequence 18 BP; 6 A; 12 C; 0 G; 0 T; 0 U; 0 Other; 93.8%; Query Match Best Local Similarity

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230 GTGGTGGTGGTGGCGG 245 Greeregreered 3 18 ð 셤

15; Conservative

Matches

ADO26720 standard; DNA; 18 AD026720; ※記録は※

RESULT 759

12-AUG-2004 (first entry)

phenotype; phenotypic preference; phenotype modulation; leader; ds. Frazer IH; 

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Synthetic leader sequence encoding DNA SEQ ID NO:113
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Synthetic

WO2004042059-A1

21-MAY-2004

10-NOV-2003; 2003WO-AU001487

08-NOV-2002; 2002US-0425163P.

(UYQU ) UNIV QUEENSLAND

WPI; 2004-411519/38. P-PSDB; ADO26721 Constructing synthetic polynucleotide for modulating the quality of a selected phenotype displayed by an organism comprises replacing a first codon with a synonymous codon to construct the synthetic polynucleotide.

Example 1; SEQ ID NO 113; 86pp; English.

The present invention describes a method for constructing a synthetic polyunclectide from which a polypeptide is producible to confer a selected phenotype to an organism of interest or part in a different plantide. The method comprises: (a) selecting a first codon of the parent polyunclectide for replacement with a synonymous codon, where the parent polyunclactide. The method comprises: (a) selecting a first codon of the parent polyunclactide for replacement with a synonymous codon, where the parent polyunclactide for replacement with a synonymous codon, where the synonymous codon is selected from organisms or parts, where the test organisms are selected from organisms of the same species as the organism of interest and organisms that are related to the organisms of interest and organisms the first codon with the synonymous codon to construct the synthetic polyunclactide. Also described: (1) a method for the expension of interest or its parts; (2) a synthetic polyunclactide constructed from the method above; (3) an organism or interest or part containing a synthetic polyunclactide constructed from the method above; (3) an organism or interest or part containing a synthetic polyunclactide constructed from the method above; (4) an organism or interest or part containing a synthetic polyunclactide constructed from the method above; (4) an organism or interest or part containing a synthetic polyunclactide organism or interest or part containing a synthetic polyunclactide organism or interest or part containing a synthetic polyunclactide organism or interest or part containing a selected phenotype or a phenotype of the same olass as the selected or phenotype int is displayed by an organism of interest or part and that results from the expression of a parent polymoclactide that concedes the polypeptide; and (7) a method of reducing the quality of a selected phenotype that is displayed by an organism of interest or part encodes the polypeptide. The expression of a parent polymoclactide that encodes the polypeptide. Th phenotype displayed by an organism or part. The present sequence encodes a synthetic leader sequence, which is used in an example from the present

Sequence 18 BP; 0 A; 0 C; 12 G; 6 T; 0 U; 0 Other;

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Gaps
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0
Ouery Match 0.8%; Score 14.4; DB 1; Length 18; Best Local Similarity 93.8%; Pred. No. 7.4e+02;
                                   1; Indels
                                   0; Mismatches
                                   15; Conservative
                                 Matches
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AAV13329 standard; DNA; 19 BP

AAV13329

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This 3'-PCR primer is used in a novel method for identification of allele
types (in this case human leukocyte antigen (HLA) class II gene alleles)
of a known polymorphic genetic locus in a sample. The allele type is
identified by first combining the sample with a sequencing reaction
mixture containing a polymerase, uncleoside feed stocks, one type of
mixture terminating mucleoside and a sequencing primer under conditions
chain terminating mucleoside and a sequencing primer under conditions
suitable for template dependent primer extension to form a number of
coligonucleotide fragments of differing lengths, which are then evaluated
on a denaturing gel. This determines the position of the type of base
corresponding to the chain terminating bases in the primer. However, this
method differs from standard sequencing procedures, instead of performing
and evaluating four concurrent reactions, the sample is concurrently
combined with at most three sequencing reaction mixtures containing
different types of chain terminating nucleosides. The method can be used
for the evaluation of polymorphic sites, and for determining the allelic
type of a polymorphic gene. The methods are particularly useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Identification of allele type of a known polymorphic genetic locus - used particularly for human leukocyte antigen allele determination.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                    polymorphic; Human leukocyte antigen; HLA; DNA sequencing; PCR; polymerase chain reaction; allele; ss.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.4; DB 1; Length 19; 33.8%; Pred. No. 7.7e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                   3'-primer for HLA DR2 (15 and 16) allele amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 19 BP; 2 A; 7 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            determining the HLA allele present in a sample
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Green RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Leushner J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Page 17; 75pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1590 CCGCGTGGTGGACACC 1605
                                                                                                                                   ВР
230 GTGGTGGTGGTGGCGG 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96WO-US020202.
                                  1 Greeregreereg 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95US-00577858.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (VISI-) VISIBLE GENETICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 CCGCGCGGTGGACACC 2
                                                                                                                                   AAT74921 standard; DNA; 19
                                                                                                                                                                                                             (first entry)
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Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dunn JM,
                                                                                                                                                                                                                                                                                                                                                                                      WO9723650-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-DEC-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Stevens JK,
                                                                                                                                                                                                             07-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                             03-JUL-1997
                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                         AAT74921;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 761
AAV13329
ID AAV133
XX
AC AAV133
                                                                                              RESULT 760
                                                                                                                  AAT74921,
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10017621-3sl.rng

Synthetic

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The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or call-cycle dependent kinases CDK1, PCNA, and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AAA86415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in ribozyme is resistant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel decorin binding proteins, DBP A and B useful as vaccines for protecting humans against Lyme disease and as immunogens for production of antibodies used in passive immunotherapy, or as diagnostic reagents.
                                                                                                                                                                                           New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Decorin binding protein; DbpA; DbpB; adhesin; infection; Lyme disease; spirochete infection; vaccine; passive immunotherapy; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present sequence represents a primer which was used to isolate {\sf DN} encoding a decorin binding protein ({\sf Dbp}). The specification describes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR primer used to isolate DNA encoding a decorin binding protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Roberts W, Lathigra R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.4; DB 1;
Pred. No. 7.7e+02;
0; Mismatches 1;
                                                                                                                 Robbins JM;
                                                                                                                                                                                                                                                                            Disclosure; Page 51; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 86; 93pp; English
                                                                                                                   я,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    996 CCTGCTCATCAACGAG 1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
99WO-US028772
                                     98US-0110954P
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                                                                                                                   Barber
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA14782 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mullikin BA,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Borrelia burgdorferi
                                                                                                                   Tritz R, Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-317936/27.
                                                                            (IMMI-) IMMISOL INC
                                                                                                                                                          WPI; 2000-412314/35.
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06-DEC-1999;
                                       04-DEC-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hanson MS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAA14782;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA14782,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Classifying patients with inflammatory disease, specifically asthma - according to polymorphisms in 5-lipoxygenase gene regulatory region, e.g. to identify candidates for lipoxygenase inhibitor treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence was used in the development of a novel method for classifying patients suffering from an inflammatory disease. The method comprises identifying in DNA from at least 1 patient a sequence polymorphism, as compared with the normal 5-lipoxygenase (5-DX) gene (AAT88431), in a 5-LOX regulatory gene sequence. The method can be applied to subjects with asthma, ulcerative colitis, bronchitis, sinusitis, psoriasis, allergic and non-allergic rhinitis, lupus or rheumatoid arthritis. Specifically it can be used to diagnose asthma or susceptibility to disease, identify treatments suitable for individual patients or assess the likely success of treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ribozyme, hairpin, hammerhead, gene therapy, vasotropic, restenosis, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                            Inflammatory disease; polymorphism; 5-lipoxygenase; asthma; ulcerative colitis; bronchitis; sinusitis; psoriasis; rhinitis; arthritis; diagnosis; treatment; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.4; DB 1; Length 19; 93.8%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                     Exon 11 for human 5-lipoxygenase gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Grobholz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 19; 56pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                    (BGHM ) BRIGHAM & WOMENS HOSPITAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1716 CCTGAGCCATGTTCAC 1731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cdk3 ribozyme binding site #43.
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                                                                                                                                                                                                                                                                                                                                                        96US-0016890P.
97US-00846020.
                                                                                                                                                                                                                                                                                                                     97WO-US007137.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           In K, Asano K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ccrdadccaggrrcac 18
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-DEC-2000 (first entry)
                    (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1997-558997/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
les 15; Conserv
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                                                           Sense primer
                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                       WO9742347-A2
                                                                                                                                                                                                                                                                                                                   29-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                               25-APR-1997;
                                                                                                                                                                                                                                                                                                                                                        06-MAY-1996;
                    14-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-JUN-2000
                                                                                                                                                                                                                                                                              13-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Drazen JM,
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Query Match

Matches

à 셤 762

RESULT

Mammalia

0;

Gaps

0

Length 19;

in

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DbpA and DbpB. DbpA and DbpB are adhesins, and are immunogenic. DbpA is a target for antibody-mediated killing of B. burgdorferi during the early stages of infection. The polypeptides are useful for producing antibodies to diagnose Lyme disease (spirochete infections), or for producing vaccines for prophylaxis and/or treatment of such infections. The antibodies may be useful in passive immunotherapy, as diagnostic reagents and as reagents in other processes such as affinity chromatography
                                                                                                                                                                                                                                                                Sequence 19 BP; 8 A; 5 C; 4 G; 2 T; 0 U; 0 Other;
   22222223
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0
    0.8%; Score 14.4; DB 1; Length 19; 93.8%; Pred. No. 7.7e+02; ive 0; Mismatches 1; Indels
                                                             925
                                                                                      N
                                                            910 GTGAAACTGTTCCTGT
                                Conservative
Query Match
Best Local Similarity
Matches 15; Conserv
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0

Gaps

GTGTAACTGTTCCTGT dd

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Phosphorothioate 19-mer oligonucleotide #6.
    AAZ57154 standard; DNA; 19
             (first entry)
             03-APR-2000
                            Synthetic
        AAZ57154;
RESULT 764
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Phosphorothioate; activator; oligonucleotide synthesis; phosphoramidite; phosphitylating reagent; ss

Location/Qualifiers ...19 '\*tag= Key modified\_base

/\*tag= a /note= "phosphorothioate linkages" W09962922-A1

99WO-US012251 02-JUN-1999; 09-DEC-1999

98US-0087757P 98US-00177953 02-JUN-1998; 23-OCT-1998;

(ISIS-) ISIS PHARM INC.

Manoharan M, Sanghvi Y,

Ravikumar VT;

WPI; 2000-097311/08.

Preparation of nucleoside phosphoramidites and oligonucleotides

Disclosure; Page 30; 73pp; English.

ERR alpha gene.

Example 26; Page 84; 153pp; English

oligonucleotides (ON's) prepared using pyridinium, imidazolium or benzimidazolium salts as activators. The preparation of a phosphitylated compound comprises reacting a compound having a hydroxyl group with a phosphitylating reagent in the presence of a pyridinium salt in a solvent. The phosphoramidites are useful as building blocks for synthesis of oligonucleotides, which are potentially useful in therapeutic and diagnostic applications. The activators can be produced in situ by mixing pyridine and an acid, producing benefits in large scale synthesis. Compared with conventional activators, e.g. 1H tetrazole, the pyridinium salts, and materials necessary for their generation in situ, are nonschlosive and easier to store, and also cheaper and have higher solubility in organic solvents. Final purity of the phosphitylated material results from use of a less acidic reaction medium when pyridinium salts are used. The present sequence represents a The present invention describes nucleoside phosphoramidites and

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                                                                                                                                                                                                                                                                                                                osteochondrodysplasia; osteogenesis imperfecta; osteomalacia; sclerosing bone dysplasia; fibrodysplasia ossificans progressiva; osteoblastic bone metastasis; prostate cancer; osteosarcoma; PCR primer;
                                                                                                                                                                                                                                                                             Oestrogen related receptor alpha, ERRalpha, osteoblast proliferation, osteoblast differentiation, bone loss, osteoporosis, osteoarthritis, Paget's disease, periodontal disease, osteolytic bone tumour;
                                                                               Gaps
 synthesis of which
                                                                                ö
                                                      Score 14.4; DB 1; Length 19;
Pred. No. 7.7e+02;
0; Mismatches 1; Indels
          invention
                                  G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                       PCR primer for osteoblast-associated marker OPN.
phosphorothioate 19-mer oligonucleotide, described in an example from the present
                                                                                                                                                                                     ВЪ
                                                                                                      230 GTGGTGGTGGTGGCGG 245
                                                                                                                                                                                                                                                                                                                                                                                                                                             30-AUG-2000; 2000WO-CA001015.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99CA-02284103.
                                  Sequence 19 BP; 0 A; 0 C; 12
                                                                                                                           18
                                                                    93.8%;
                                                                                                                                                                                     AAF80370 standard; DNA; 19
                                                                                                                                                                                                                                  (first entry)
                                                                                                                             GTGGTGGTGGTGG
                                                                                15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-273487/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bonnelye
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (AUBI/) AUBIN J E. (BONN/) BONNELYE E.
                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                WO200122988-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-SEP-1999;
                                                                                                                                                                                                                                  29-JUN-2001
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                                                                                                                                                                                                                                                                                                                                                                           Rattus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Aubin JE,
                                                                                                                                                                                                          AAF80370;
                                                          Query Match
                                                                       Local
                                                                                Matches
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PCR primers AAF80364-83 were used to amplify osteoblast-associated markers. The specification describes a method for increasing or reducing osteoblast proliferation or differentiation. The method comprises administering an oestrogen related receptor alpha (ERRalpha) agonist or antagonist, a purified ERRalpha or antibody, a nucleotide sequence encoding ERRalpha, an ERRalpha antisense sequence, or an ERRalpha modulator. The method is useful for increasing or reducing osteoblast proliferation or differentiation in a mammal. The method may be used for treating a disorder associated with bone loss, such as osteoporosis, osteoarthritis, Paget's disease, periodontal disease, osteolytic bone tumour metastases in e.g. breast cancer and multiple mysteoping. osteochondrodysplasias, osteogenesis imperfecta, sclerosing bone dysplasias and osteomalacia. The method may also be used for treating fibrodysplasia ossificans progressiva, or osteoblastic bone metastases. prostate cancer and osteosarcomas

Sequence 19 BP; 3 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

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                                                                                                                                                                                                                                                                                                                                                                                                Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keraclolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keracolytic and virtucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diseases such as psoriamis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                           Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:344.
                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
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0
0.8%; Score 14.4; DB 1; Length 19; 93.8%; Pred. No. 7.7e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 97; 408pp; English.
                                                                                       388
                                                                                                                                                                                                                                   AAH57920 standard; DNA; 19 BP.
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                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                   CAGGCTTCAGCCAAGT
                                                                                     373 CAGGCTTCAGCCACGT
Query Match
Best Local Similarity 93.8'
Matches 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-300427/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (IMMU-) IMMUSOL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200130362-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens.
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                                                                                                                                                                                                                                                                                                                        10-SEP-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                              19
                                                                                                                                                                                                                                                                            AAH57920;
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                                                                                                                                                                                                                                                                                                                                                                                                  short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        that downregulates expression of a nuclear factor kappa B (NF-kappaB) gene by RNA interference. Also described: (1) kits for in vitro or in vivo delivery of siNA; (2) conjugates and/or complexes of siNA; and (3) vectors that express BiNA. The siNAs have vasotropic, nootropic, antiparkinsonian, neuroprotective, cytostatic, antiinflammatory, antiallergic, virucide, anti-HIV, immunosuppressive, anticonvulsant and nephrotropic activities, and can be used in gene therapy, and for the modulation (inhibition) of expression or activity of NF-kappaB by RNA interference (siNA target mRNA, RNA splice variants, post-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes a short interfering nucleic acid (siNA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New short interfering nucleic acid downregulates expression of the NF-
                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   kappaB gene useful e.g. for treatment and diagnosis of cancer and
                                                                                       ö
                                                   Length 19;
                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                Human REL-A short interfering nucleic acid SEQ ID NO:31.
               Sequence 19 BP; 4 A; 5 C; 4 G; 6 T; 0 U; 0 Other,
                                                 0.8%; Score 14.4; DB 1; 93.8%; Pred. No. 7.7e+02;
                                                                                     0; Mismatches
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                                                                                                                           996 CCTGCTCATCAACGAG 1011
                                                                                                                                                                                                                                                       BP.
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11-MAR-2002; 2002US-0363124P.
06-JUN-2002; 2002US-0386782P.
29-AUG-2002; 2002US-0406784P.
                                                                                                                                                            1 cerecrearcas 16
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2002US-0409293P
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                                                                                                                                                                                                                                                     ADA25683 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ij
                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                  Local Similarity 93.6
Les 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nuclear factor; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-SEP-2002;
                                                                                                                                                                                                                                                                                                                            20-NOV-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-AUG-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                           ADA25683;
                                                   Query Match
                                                                                                                                                                                                                 RESULT 767
                                                                                     Matches
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Page 387

transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA sequences can be used to modulate expression of NF-kappaB genes, in calls, tissue explants or organisms, e.g. by ex vivo gene therapy, in grafts and transplants for treating restenosis and central nervous system lesions and injuries (Alzheimer's, Parkinson's or Huntington's diseases, cancers, other proliferative diseases (restenosis) or for treating many disease), inflammatory and/or allergic diseases, viral infections (including HIV), autoimmune diseases and transplant rejection, and also for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents human v-rel reticuloendotheliosis viral oncogene homologue A (REL-A) sinA, which is used in the exemplification of the present invention. REL-A is a nuclear factor of the kappa light polypeptide gene 

0.8%; Score 14.4; DB 1; Length 19; 68.8%; Pred. No. 7.7e+02; ative 4; Mismatches 1; Indels Sequence 19 BP; 4 A; 6 C; 3 G; 0 T; 6 U; 0 Other; 538 CCCATCTTTGACAAGC 553 |||||:|:::||||| | | CCCAUCUUUGACAAUC 16 11; Conservative Query Match Best Local Similarity Matches à q

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Gaps 0,0

> Human REL-A short interfering nucleic acid SEQ ID NO:167. ADA26032 standard; RNA; 19 BP 20-NOV-2003 (first entry) ADA26032;

RNA interference, vasotropic, nootropic; antiparkinsoniah; neuroprotective; cytostatic; antiinflammatory; antiallergic; virucide; neuroprotective; cytostatic; antiinflammatory; antiallergic; gene therapy; mondulation; immunosuppressive; anticonvulsant; nephrotropic; gene therapy; Alzheimer's disease; Parkinson's disease; Huntington's disease; epilepsy; dementia; amyotrophic lateral sclerosis; cancer; polycystic kidney disease; inflammatory disease; inflammatory disease; viral infection; HIV; autoimmune disease; transplant rejection; ribozyme; human; v-rel reticuloendotheliosis viral oncogene homologue A; REL-A; short interfering nucleic acid; siNA; nuclear factor kappa B; NF-kappaB; nuclear factor; ss

WO2003070970-A2 Homo sapiens. 28-AUG-2003 Synthetic

2002US-0358580P. 2002US-0363124P. 2002US-0386782P. 20-FEB-2003; 2003WO-US004951 20-FEB-2002; 11-MAR-2002; 06-JUN-2002;

2002US-0406784P. 2002US-0409293P 2003US-0440129P 15-JAN-2003; 29-AUG-2002; 05-SEP-2002 09-SEP-2002

Beigelman L; WPI; 2003-689788/65 Mcswiggen J,

(RIBO-) RIBOZYME PHARM INC.

The present invention describes a short interfering nucleic acid (siNA) that downregulates expression of a nuclear factor kappa B (NF-kappaB) agene by RNA interference. Also described: (1) Kits for in vitro or in vivo delivery of siNA: (2) conjugates and/or complexes of siNA; and (3) vectors that express siNA. The siNAs have vasotropic, nootropic, antiparkinsonian, neuroprotective, cytostetic, antiinflammatory, and (3) expression of capparkinsonian, neuroprotective, cytostetic, antichlammatory, and (3) expression of midlallergic, virucide, and can be used in gene therapy, and for the nephrotropic activities, and can be used in gene therapy, and for the interference (siNA target mRNA, RNA splice variants, post-transcriptionally modified RNA, pre-RNA and/or RNA templates). The siNA sequences can be used to modulate expression of NF-kappaB genes, in cells, tissue explants or organisms, e.g. by ex vivo gene therapy, in grafts and transplants for treating restenosis and central nervous system explessy, dementia or amyotrophic lateral sclerosis) or for treating many cancers, other proliferative diseases (restenosis and polycystic kidney cincluding HIV), autoinmune diseases and transplant rejection, and also for drug screening, diagnosis, target identification and validation; control of the contro short interfering nucleic acid; siNA; protein tyrosine phosphatase type IV; PRL3; RNA interference; cytostatic; mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents human v-rel reticulcendotheliosis viral oncogene Analysis viral oncogene Analysis, which is used in the exemplification of the present invention. REL-A is a nuclear factor of the kappa light polypeptide gene New short interfering nucleic acid downregulates expression of the NF-kappaB gene useful e.g. for treatment and diagnosis of cancer and Gaps Protein tyrosine phosphatase type IV (PRL3) gene siNA, SEQ ID No 99. . 0 0.8%; Score 14.4; DB 1; Length 19; 93.8%; Pred. No. 7.7e+02; tive 0; Mismatches 1; Indels Sequence 19 BP; 6 A; 3 C; 6 G; 0 T; 4 U; 0 Other; Example 3; Page 127; 149pp; English. 2002US-0406784P. 2002US-0408378P. 2002US-0409293P. 2003US-0440129P. ADF71314 standard; RNA; 19 BP. 538 CCCATCTTTGACAAGC 553 2002US-0363124P. 2002US-0386782P. 11-FEB-2003; 2003WO-US004347 2002US-0358580P 19 cccarcrrrdacaarc 4 (first entry) 15; Conservative enhancer in B-cells. Similarity WO2003070886-A2. 29-AUG-2002; 05-SEP-2002; 09-SEP-2002; 15-JAN-2003; inflammation. Homo sapiens. 11-MAR-2002; 06-JUN-2002; 20-FEB-2002; 28-AUG-2003. cancer; ss. ADF71314; Query Match Best Local S RESULT 769 ADF71314/c Matches g ò

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The invention relates to a novel short interfering nucleic acid (siNA) that downregulates expression of a protein tyrosine phosphatase type IV (PRL3) gene by RNA interference. The invention further relates to modulating the expression of PRL3 genes in cells, tissue explants or organisms by the introduction of an siNA, kits for in vitro or in vivo delivery of an siNA, conjugates and/or complexes of siNA, and vectors that express siNA. The novel siNA's of the invention have cytostatic activity. SiNA's are used to modulate expression of PRL3 genes, in cells, tissue explants or organisms, e.g. for treating cancer but also for drug screening, diagnosis; target identification and validation; generic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein tyrosine phosphatase type IV; PRL3; RNA interference; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                               engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). This polynucleotide sequence represents a short interfering nucleic acid for downregulating the
                                                                                                                                                                                                                                                                                                                                                                                                                                     expression of a protein tyrosine phosphatase type IV (PRL3) gene of the
                                                                                                               New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer , downregulates expression of a protein tyrosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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                                                                                                                                                                                Example 3; SEQ ID NO 99; 131pp; English.
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                                                  Usman N;
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2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
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                 (RIBO-) RIBOZYME PHARM INC
                                                  Beigelman L,
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                                                                                                                                diagnosis of cancer , down
phosphatase type IVa gene.
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Best Local Similarity 93.8
Matches 15; Conservative
                                                                                 WPI; 2003-697606/66
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29-AUG-2002;
05-SEP-2002;
                                                Mcswiggen J,
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11-MAR-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). This polymucleotide sequence represents a short interfering uncleic acid for downregulating the expression of a protein tyrosine phosphatase type IV (PRL3) gene of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Screening; G protein-coupled receptor; cholesterol metabolism; ss; inflammatory disease; transplantation rejection; immune insufficiency; infection; PCR; primer; TNF alpha.
                                                                                                                                                                                                                                                                                                     The invention relates to a novel short interfering nucleic acid (siNA)
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                                                                                        New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of a protein tyrosine
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11.2%; Pred. No. 7.7e+02;
ve 2; Mismatches 1; Indels
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                                                                                                                                                                                                                                  Example 3; SEQ ID NO 25; 131pp; English.
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14-JUN-2001; 2001JP-00180562.
16-JUL-2001; 2001JP-00214922.
27-DEC-2001; 2001JP-00397767.
22-PEB-2002; 2002JP-0045728.
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                                                                                                                                                               phosphatase type IVa gene.
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ses 13; Conservative
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                            WPI; 2003-697606/66
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-075569/07.
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                                                       The invention comprises a method for screening for compounds that are receptor protein. The method of the invention is useful for screening agonists or antagonists to alter binding properties of novel G proteinmethod of the invention is useful in the diagnosis and treatment of inflammatory diseases, excessive immune reaction after transplantation, immune insufficiency and infections. The present DNA sequence represents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cytostatic; vasotropic; nephrotropic; cerebroprotective; treating leukaemia; solid tumors; restenosis; polycystic kidney disease; bronchiolitis; glomerulonephritis; stroke; RNA interference; shorthinterfering mucleic acid; siNA; short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; human; platelet derived growth factor receptor; PDGFr; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New short interfering nucleic acid, useful e.g. for treatment and diagnosis of tumors, downregulates expression of the platelet-derived growth factor receptor gene.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human PDGFr-targeted siNA upper strand SEQ ID NO:73.
                                                                                                                                                                                                                 Sequence 19 BP; 2 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 3; SEQ ID NO 73; 148pp; English
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                             Disclosure; Page 174; 186pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2002US-0358580P.
2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
                                                                                                                                                                                                                                                                                                               691
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                                                                                                                                                                                                                                                                                                                                           17 AAGCTCACGGACAACC
                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                     a TNF alpha PCR primer
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                                                                                                                                                                                                                                                              Local Similarity
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06-JUN-2002;
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05-SEP-2002;
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CC The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human platelet-derived growth factor creeptor (PDGFT) gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (siRNA, doublect stranded RNA, micro-RNA (miRNA) and short interfering RNA (siRNA, doublect stranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA). The siNAs can be unmodified or chemically modified, can contain contain and vector and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siRNA; conjugates and/or complexes of siRNA; and vectors that express siNA, The siNAs are used to modulate expression of the PDGFr gene in cells, tissue explants or coganisms (e.g., by ex vivo gene therappy), or in grafts and transplants of siRNA; and solid tumours, restenosis, polycystic kidney disease, bronchiolitis, glomerulonephritis and stroke. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the upper strand of a human PDGFr transcript transcript
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human PDGFr-targeted siNA lower strand SEQ ID NO:384.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence 19 BP; 2 A; 5 C; 8 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADO14953 standard; RNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 Acqueceecuccueee 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-FEB-2003; 2003WO-US003473.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2002US-0358580P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2002US-0409293P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            270 ACGIGCIGCICCIGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  target sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003072704-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-AUG-2002;
05-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-SEP-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AD014953;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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(TAKE ) TAKEDA CHEM IND LTD

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receptor (PDGEX) gene by RNA interference. The sinka may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the sinka include short interfering RNA (sinka, double-stranded RNA, micro-RNA, minka) and short interfering RNA (sinka, double-can be unmodified or chemically modified, can contain deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of sinka, conjugates and/or complexes of sinka, and vectors that express sinka. The sinka are used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               treating leukaemia and solid fumours, restenosis, polycystic kidney disease, bronchiolitis, glomerulonephritis and stroke. The siNAs are also useful for drug screening, diagnosis, therapeutic target identification and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the lower strand of a human PDGFr targeted double-stranded siNA, which is identical to the PDGFr transcript
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modulate expression of the PDGFr gene in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the treatment of a variety of conditions. They may be used for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               antidiabetic; anorectic; anabolic; eating-disorder; immunosuppressive;
GPCR; PCR; primer; ss; tumour necrosis factor alpha; TNF alpha.
                                                                                                    New short interfering nucleic acid, useful e.g. for treatment and diagnosis of tumors, downregulates expression of the platelet-derived
                                                                                                                                                                                                                             The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human platelet-derived growth factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGR5; GLP-1; glucagon-like peptide-1; G protein coupled receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.4; DB 1; Length 19; 93.8%; Pred. No. 7.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 4 A; 8 C; 5 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                        Example 3; SEQ ID NO 384; 148pp; English.
                   Chowrira B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INF-alpha mRNA quantifying primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADP67060 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-MAR-2003; 2003JP-00092033.
13-JUN-2003; 2003JP-00168817.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-NOV-2003; 2003WO-JP014292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2002JP-00328581
                                                                                                                                              growth factor receptor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18 ACGTGCGGCTCCTGGG 3
                   Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-AUG-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
es 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        target sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2004043468-A1
                   Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            L2-NOV-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADP67060;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADP67060,
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The invention relates to screening agonist or antagonist of receptor protein or glucagon-like peptide-1 (GLP-1) secretagogue or GLP-1 secretion inhibitor, by using G protein coupled receptor TGR5. The TGR5 is derived from human, mouse, rat, cow, rabbit or guinea pig. The compound is an inhibitor of cytokine production. The compound is a GLP-1 secretion promoter. The agonist of GPCR secretion promoter, pancreas regenerating agent, pancreatic beta-differentiation or growth promoter. The agonist of GPCR is useful for producing a GLP-1 secretion promoter, prophylactic and/or therapeutic agent of diabetes, insulin hyposecretion, pancreatic exhaustion, obesity, anoracia or regeneration of pancreas. The antagonist of GPCR having is useful for producing GLP-1 secretion inhibitor and prophylactic and/or therapeutic agent of hypoglycaemia. TGR containing the compound is useful as prophylactic or therapeutic agent of pathological conditions associated with regulation of physiological conditions associated with regulation of physiological conditions associated with regulation of physiological conditions and the superior and failure, myocardial infarction, acute renal failure, angina, arrhythmia, chronic obstructive pulmonary disease, are relative colitis, allergy, osteoarthritis, diabetes, gastric ulcer, ulcerative colitis, allergy, osteoarthritis, laubetes, gastric ulcer, infections disease or after transplant. Sequences ADP67047-ADP67061 crepresent PCR primers and probes specific for interleukin (IL)-1 alpha, used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rat; matrix metalloproteinase 11; MMP11; ss; antisense oligonucleotide; phosphorothioate linkage; 2'-O-methoxyethyl sugar moiety; 5-methylcytosine; hyperproliferative disorder; cancer; cytostatic; probe.
                                                                                                                      Screening agonist or antagonist of receptor protein or glucagon like peptide-1 secretion inhibitor, by using G protein coupled receptor and compound capable of altering binding property of cholesterol metabolism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                       Itoh F;
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                                       H,
                                       Uejima
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rat matrix metalloproteinase 11 (MMP11) DNA probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19 BP; 2 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
                                       Komatsu H,
                                                                                                                                                                                                                              Example 11; SEQ ID NO 34; 274pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IL-1 beta, IL-6, IL-8 and tumour necr
respective genes mRNA quantification.
                                       Kawamata Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-DEC-2002; 2002US-00316755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 AAGCTCACGGACAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 93.6
tes 15; Conservative
                                       Fujii R,
                                                                            WPI; 2004-440561/41.
                                                                                                                                                                                      related substance.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2004110152-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-JUN-2004.
                                       Hinuma S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADP27088;
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Sequence 19 BP; 3 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                   Example 13; SEQ ID NO 14; 76pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1721 GCCATGTTCACCTGCC 1736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ30930 standard; DNA; 20 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 GCCATGGTCACCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 93.8
Matches 15; Conservative
(ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SHMA ) SHIMADZU CORP.
                                                        Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1992-394404/48.
                                                                                                           WPI; 2004-440341/41.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-MAR-1993
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                     Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ30930;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tdh 4.
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CC CC XXX XX BY XX
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18

93.8%;

Labelled primers-a and -b (AAQ42490 and AAQ42491, respectively) were used to amplify sample DNA from Vibrio parahaemolyticus WP1. Primer-a is specific to the tdh gene. A third oligonucleotide (AAQ42492) was added to the denatured PCR product, allowed to anneal and the annealed product was added to a solid substrate. The target sequence was detected by measuring absorbance at 492nm, without the need for electrophoresis Detection of nucleic acid - involves amplifying using DNA synthetase and labelled oligo:nucleotide, modifying etc. avoiding electrophoresis. direct hemolysin-related hemolysin gene type 1 and type 2. These sequences can also be used to detect V.p by acting as polymerase chain reaction primers. These oligos allow highly sensitive detection of V.p Gaps Gaps .; 0 .. Polymerase chain reaction; amplification detection assay; ss. 0.8%; Score 14.4; DB 1; Length 20; 33.8%; Pred. No. 8.1e+02; ve 0; Mismatches 1; Indels 1; Indels 0.8%; Score 14.4; DB 1; Length: 93.8%; Pred. No. 8.1e+02; iive 0; Mismatches 1; Indels PCR primer-b to amplify Vibrio parahaemolyticus WP1 DNA. Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other; Seguence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other; Example 1; Page 3; 5pp; Japanese. ·; BP. 094/c AAQ48094 standard; DNA; 20 BP. 224 ATGAGAGTGGTGG 239 239 91JP-00277775 91JP-00277775 93.88; 16 Argadagregragreg 1 AAQ42491 standard; DNA; 20 (revised)
(first entry) (first entry) 224 ATGAGAGTGGTGGTGG 16 ATGAGAGTGGTAGTGG Query Match
Best Local Similarity 93.8
Matches 15; Conservative Best Local Similarity 93.8 Matches 15; Conservative (SHMA ) SHIMADZU CORP WPI; 1993-184818/23. 24-OCT-1991; 24-OCT-1991; JP05111398-A 07-OCT-1993 25-MAR-2003 10-FEB-1994 07-MAY-1993. Synthetic. AAQ48094; AAQ42491; Query Match RESULT 778 RESULT 777 AAQ42491/ AAQ48094/ 0000×0 à g SAXAREX  $\overset{\circ}{\circ}$ 0 The invention relates to a compound targeted to a nucleic acid molecule encoding a matrix metalloproteinase 11 (MMP11) polypeptide. The compound is an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothioate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl agar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of the MMP11 polypeptide and in preparation of a composition for treating hyperproliferative disorders, e.g. cancer. This sequence repersents a probe which hybridises to DNA encoding the rat MMP11 polypeptide of the invention. Oligo-nucleotide for detecting microbe with high sensitivity and selectivity - more specifically for targetting a nucleotide sequence coding a thermostable direct haemolysin-related haemolysin gene type 1 New oligonucleotide compound that inhibits expression of matrix metalloproteinase 11, useful for preparing a composition for treating hyperproliferative disorder, e.g., cancer. Gaps Vibrio parahaemolyticus; thermostable direct; haemolysin-related; haemolysin gene; type 2; type 1; V.p; polymerase chain reaction; PCR; primer; detection; ss. The sequences give in AAQ30925-32 are oligonucleotides which target sequences in Vibrio parahaemolyticus (V,p) which encode thermostable ·, 0.8%; Score 14.4; DB 1; Length 19; 33.8%; Pred. No. 7.7e+02; ve 0; Mismatches 1; Indels

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91JP-00059820 91JP-00059820 ö

Synthetic.

Ohashi T,

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The DNA probe is prepared by introducing an amino group at the 5' terminus of DNA or a nucleotide, followed by using transglutaminase to bond a labelling substance to the obtained DNA having the introduced amino group. The enzymatic reaction using transglutamase is advantageous in time and cost since many chemical reaction stages associateed with e.g. radiolabelling of probes can be by-passed. The enzymatic reaction is mild, decrease of activity of the labelled compound can be minimised and producibility is increased
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          terminus of DNA or a nucleotide, followed by using transglutaminase to bond a labelling substance to the obtained DNA having the introduced amino group. The enzymatic reaction using transglutamase is advantageous in time and cost since many chemical reaction stages associateed with e.g. radiolabelling of probes can be by-passed. The enzymatic reaction is mild, decrease of activity of the labelled compound can be minimised and producibility is increased. Two PCR primers (AAO46095, AAO46095) were used to amplify DNA samples prepared from vibrio Parahaemolyticus WPI
                    Prepn. of DNA probe - by introducing amino gp. at 5'-terminal of DNA, then bonding labelling substance to DNA using transglutaminase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         of DNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The DNA probe is prepared by introducing an amino group at the 5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR primer used for amplifying Vibrio parahaemolyticus tdh gene.
                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       by introducing amino gp. at 5'-terminal o substance to DNA using transglutaminase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                              20;
                                                                                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.4; DB 1; Length 93.8%; Pred. No. 8.1e+02; iive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                       Seguence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Probe; enzyme labelling; transglutaminase; ss.
                                                                                 Disclosure; Page 3; 5pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 3; 5pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                          224 ATGAGAGTGGTGG 239
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                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ46096 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Prepn. of DNA probe - b
then bonding labelling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SHMA ) SHIMADZU CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1993-277466/35
                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                    15;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ46096;
                                                                                                                                                                                                                                                                                                                                              Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ46096,
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    Dp
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligo:nucleotide(s) specific for Vibrio parahaemolyticus, E.coli or S.aureus - used as primers or probes partic. for detecting food poisoning and in food inspection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotides AAQ48091-Q48094 (designated primers c, d, e and f, respectively) are complementary to a target sequence from the tdh gene from V.parahaemolyticus. They are used as PCR primers in the following pairs: c/d, e/f, c)f to specifically amplify fragments of 373, 199 or 251bp, respectively, from the tdh gene. (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                                    Shirasaki Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                       Thermostable direct haemolysin gene; tdh; bacterial detection; nucleic acid amplification; polymerase chain reaction; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oligonuclectide used for production of probe for tdh gene.
                                                                                                                                                                                                                                                                                                                                                                                  Ozaki H, Nishimura N,
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Vibrio parahaemolyticus tdh gene PCR primer (f)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            transglutaminase; ss
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 2; Page 119; 122pp; English.
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92JP-00066082
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            enzyme labelling;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Vibrio parahaemolyticus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SHMA ) SHIMADZU CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1993-277466/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1993-265932/34
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                                                                               food poisoning; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              correct PN field.)
                                                                                                                                                                                                                                          20-AUG-1992;
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                                                                                                                                                                                                                                                                                18-FEB-1992;
24-MAR-1992;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15;
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                                                                                                                                                               EP556504-A2
                                                                                                                                                                                                                                                                                                                                                                                                       Yamagata K;
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16

Query Match

Best Loc Matches

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AAQ46093;

AAQ46093, RESULT

Probe;

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10017621-381.rng

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PCR primers (AAT60438-43) were used in 5'RACE and 3'RACE amplifications of K562 cell cDNA in order to isolate full-length clones for the novel human intracellular tyrosine kinase Thk! (AAT6043) and for its splice vairant Tnk1-alpha (AAT60441). Primer A (AAT60442) is specific for Tnk1 and was used to identify Tnk1 sequences in 5'RACE products cloned into
                                                                                                                    Tnk1 intracellular tyrosine kinase and its splice variant - useful in gene therapy to inhibit cell transformation, stimulate haematopoietic
                                                                                                                                                                                                                                                                                           0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                        Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oligo #2 used to isolate hALR cDNA sequence.
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                                                                                                                                                                    Example 1; Page 34; 69pp; English
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                                                                                                                                                                                                                                                                                                                                           1022 TCAAGCTGGCTGACTT 1037
                                                                            Hoehn GT
                                                                                                                                             cells etc. and for diagnosis.
         96WO-US016359.
                                95US-0005286P
                                                                                                                                                                                                                                                                                                                                                             4 TCAAGGTGGCTGACTT 19
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                                                     (UYJO ) UNIV JOHNS HOPKINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                     15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GENZ ) GENZYME CORP.
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                                                                         Small D,
                                                                                                 WPI; 1997-235882/21.
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                                                                                                                                                                                                                                                                                                           Best Local Similarity
         11-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-JUN-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              regeneration
                                12-OCT-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Landes GM,
                                                                         civin CI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
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                                                                                                                                                                                                                                                    vector
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AAT85490/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                   The primers given in AAQ68497-500 are used in the detection of V. parahaemolyticus DNA. The primers given in AAQ68501-503 are used in the detection of V. cholerae DNA
                                                                                                                                                                                                                                                                                                                                                                             Detection of nucleic acid - using polymerase chain reaction and solid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                Vibrio parahaemolyticus; Vibrio cholerae; detection; amplification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tyrosine kinase; Tnkl; signal transduction; cell transformation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cell proliferation; haemacopoietic cell; bone marrow; cancer; gene therapy; diagnosis; polymerase chain reaction; PCR; primer; rapid amplification of cDNA ends; 5' RACE; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                             primer; polymerase chain reaction; PCR; ss.
                                                                                                                                                          Vibrio parahaemolyticus DNA primer
                                                                                                                                                                                                                                                                                                                                                                                                               Claim 3; Page 2; 9pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tyrosine kinase Tnkl primer A.
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         224 ATGAGAGTGGTGG 239
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                              Arcadagregragred 1
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                                                                                       AAQ68498 standard; DNA; 20
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                                                                                                                                    (first entry)
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                                                                                                                                                                                                                                                                                                                                (SHMA ) SHIMADZU CORP
                                                                                                                                                                                                                                                                                                                                                        WPI; 1994-230239/28.
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                                                                                                                                                                                                                                                                                                                                                                                         phase recognition.
                                                                                                                                                                                                                                        JP06165698-A.
                                                                                                                                                                                                                                                                                     16-JUL-1993;
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                                                                                                                                                                                                                                                                                                           30-SEP-1992;
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                                                                                                                                    27-FEB-1995
                                                                                                                                                                                                                                                               14-JUN-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT60442;
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                                16
                                                                                                             AAQ68498;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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Gaps

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Human, netrin; ATPase binding cassette transporter; ribosomal L3;
augmenter of liver regeneration; hNET; hABC3; SEM L3; hALR;
chromosome 16; exon trapping; axon; chicken; laminin domain; C. elegans;
UNC-6; cystic fibrosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated human chromosome 16 genes - encode netrin, ATPase binding cassette transporter, ribosomal L3 sub-type or augmenter of liver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Klinger
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used in the chimeric non-human animal of the invention. The chimeric non-human animal of the invention, preferably a mouse, contains a foreign chromosome(s) or chromosome fragment. The animal is produced by obtaining a hybrid cell by fusion of a cell containing the foreign chromosome with a cell having the ability to form microcells. The microcells are prepared, and fused with cells having differentiative pluripotency to form cells having differentiative pluripotency to chromosome. These cells are then introduced into an embryo, which is then implanted and brought to term. The foreign chromosome segment is at least implanted and brought to term. The foreign chromosome segment is at least chromosome segment could also contain genes associated with human chromosome segment for an interleukin-2 gene, and the Huntington's disease gene. The expression of foreign genes (especially human genes) in a non-human antimal is useful for efficient production of proteins, especially chuman antimal is useful for efficient production of proteins, especially
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT92758-T92817 represent amplification primers for human genes which are
The sequences given in AAT65489-90 are oligos which hybridise under stringent conditions to the cDNA encoding the human augmenter of liver regeneration protein (hALR). The hALR genomic sequence was isolated from human chromosome 16 by exon trapping. hALR cDNA encodes a 119 amino acid protein which is 84.8% identical and 94.1% similar to the rat ALR protein. The hALR gene is specifically isolated from the chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PCR primer; amplify; human gene; chimeric non-human animal; antibody; transgenic mouses; chromosome fragment; hybridoma production; microcell; Huntington's disease gene; pluripotent cell; interleukin-2 gene; myeloma cell; immunoglobulin; variable region; ss.
                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            animal containing foreign chromosome - for expression of
                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Primer #2 for immunoglobulin kappa variable region Vkappal-2.
                                                                                                                                                                                                     0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02;
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                                                                                                                                                                                                                                            1; Indels
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                                                                                                                                                                 Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                            Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 21; 142pp; Japanese.
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                                                                                                                                                                                                                                                                                  1657 CACACCCCTCACAGGG 1672
                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
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                                                                                                                                                                                                                                                                                                                    CACACTCCTCACAGGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (KIRI ) KIRIN BEER KK.
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                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                             region 16p13.3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-MAR-1997
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                                                                                                                                                                                                                                                                                                                    20
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                                                                                                                                                                                                                                                                                                                                                                                 RESULT 784
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          8X333333X8
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resolation of various bialfelic polymorphic markers found in the human genome (represented in AAX10269-X1237). These primers can be used in a method for determining polymorphic forms in an individual for use in e.g. crenaics, paternity testing or for phenotypic typing for diseases such as agammaglobulinemia, diabetes insipidus Lesch-Nyhan syndrome, muscular dystrophy, wiskott-Addrich syndrome, Fabry's disease, familial hypercholesterolemia, polycystic kidney disease, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary cancernhagic telangiactesis, familial colonic polyposis, Bhlers-Danlos syndrome, osteogenesis imperfecta, acute intermittent porphyria, autoimmune diseases, inflammation, cancer, diseases of the nervous syndrome, osteogenesis imperfecta, acute intermittent porphyria, as longevity, appearance (e.g. baldmess, obesity), strength, speed, endurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments. The isolated polymorphic nucleic acid segments can also be used to produce medicaments for the treatment or prophylaxis of such diseases
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express the foreign genetic material can be isolated and fused with myeloma cells to produce hybridomas capable of expressing the foreign gene (e.g. to produce the antibody)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Polymorphism, biallelic, human, forensic, paternity testing, disease, detection, phenotypic typing, characteristic, infection, hereditary, autoimmune disease, cancer, inflammation, drug, therapy, medicament,
                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated nucleic acid segments from the human genome - used for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  determining polymorphic forms for use in e.g. forensics, paternity testing or phenotypic typing for disease.
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0
                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human biallelic polymorphic marker downstream primer #428.
                                                                                                                                                              1; Indels
                                                                                 Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 3 A; 5 C; 3 G; 9 T; 0 U; 0 Other;
                                                                                                                      0.8%; Score 14.4; DB 1;
93.8%; Pred. No. 8.1e+02;
lve 0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                               BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     treatment; marker; primer; ss.
                                                                                                                                                                                                     CTGATGGGGAGAGTGA 371
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                                                                                                                                         93.8%;
                                                                                                                                                                                                                                                                                                                                               AAX10122 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                  Query Match 0.8 Best Local Similarity 93.8 Matches 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1998-286974/25.
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BP.

(first entry)

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AAV29622 standard; DNA; 20
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                                                AAV29622;
 RESULT 787
           AAV29622
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotides AAV16341-42 are used to clone the human augmenter of liver regeneration (hALR) gene (see AAV16309). ALR is a growth factor which augments the growth of damaged liver tissue while having no effect on the resting liver. Rat ALR has been shown to be capable of augmenting hepatocoytic regeneration following hepatectomy. The antisense oligonucleotides of the present sequence are used to modulate expression of hALR and prevent its translation. Antibodies against hALR can be used to block binding of its naturally occurring ligands. Host cells containing vectors with DNA inserts encoding the protein can be used in a method for identifying compounds which bind to hALR. hALR could be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human chromosome 16 genes encoding netrin, ATP binding cassette transporter, ribosomal L3 and augmenter of liver regeneration proteins useful for, e.g. treatment of liver disease and cystic fibrosis.
                                                                                                                                                                                                                                              Human, augmenter of liver regeneration, hALR; treatment; modulation; expression; antibody; identification; binding; substrate specificity; ligand; exon trap; damaged liver; treatment; PCR primer; amplify; ss.
                                     Gaps
                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Van Raay TJ;
                                                                                                                                                                                                                         3' RACE internal PCR primer used to clone the human ALR gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.4; DB 1; Length 20; 33.8%; Pred. No. 8.1e+02; ve 0; Mismatches 1; Indels
           0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; ive 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dackowski WR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 80; Page 69; 220pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Connors TD,
                                                                                                                                                 AAV16342 standard; DNA; 20 BP
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96US-00762500.
                                                                                                                                                                                               (first entry)
                                                                             20 AAGGCAAAAGCAAGAT
                                                            665 AAGGCAAAAGCAAGCT
                                      Conservative
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Query Match
Best Local Similarity
Trahes 15; Conserve
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pluripotent cell; intrinsic gene; chimeric non-human animal; construction; human; antibiotic gene; cancer cell; embryonic; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                  New human prostaglandin EP3 receptor(s) - useful for treatment and prevention of, e.g. inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·.
                                      Prostaglandin E2 receptor; EP3-V receptor; human; treatment; inflammation; EP3-VI; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; Live 0; Mismatches 1; Indels
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fuman EP3 receptor cDNA amplifying primer 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example; Page 7; 27pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
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hes 15; Conservative
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                                                                                                                           Homo sapiens.
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                                                                                                       Synthetic.
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Gaps

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1657 CACACCCTCACAGGG 1672

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15; Conservative

Matches

20 CACACTCCTCACAGGG 5

93.8%;

10017621-381.rng

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Protein containing PDZ domain, whose expression is enhanced by TNF stimulation - plays an important role in protein/protein interactions and is used for screening for proteins for use in treatment of cell proliferation disorders such as cancer.
                                                                                                                                                                                                                                                                                                                             This sequence represents a primer use to amplify and isolate clones which encode new proteins containing PDZ domains whose expression in human umbilical vascular endothelial cells (HUVBC) are enhanced by stimulation with tumnour necrosis factor (TNP) alpha. The new protein is used to identify proteins which bind to it (particularly to the PDZ domains) and the genes encoding them, for use in the treatment of cell proliferation disorders such as cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein containing PDZ domain, whose expression is enhanced by TNF stimulation - plays an important role in protein/protein interactions and is used for screening for proteins for use in treatment of cell proliferation disorders such as cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Primer 1192-1161 for PDZ domain-containing protein gene clone 32-8-1/5R3.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
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                      (CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                          Example 2; Page 29; 240pp; Japanese.
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98JP-00189944
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les 15, Conservative
                                                                      Miyata S;
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                                                                      Funahashi S,
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19-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ठे
                                                                                                                                                                                                                                                                                                                                                                                                        containing foreign chromosomes or their fragments (preferably at least containing foreign chromosomes or their fragments (preferably at least cells containing the foreign chromosomes or fragments, then fusing these with pluripotent cells such as embryonic stem cells, embryonic cancer cells or their mutants. Also reproductive cells, embryonic cancer cells or their mutants. Also described are: (1) a method of obtaining hybridoma cells by fusing a cell with a high ability to produce hybridoma cells (such as mouse Ag cells) with a cell containing the foreign chromosomes or fragments (such as normal human diploid cells); (2) a method of utilising pluripotent cells to produce chimeric and transgenic non-human animals (especially mammals such as mice) which can express the foreign chromosomes or fragments cuch as mice) which can express the foreign chromosomes or fragments cells derived from the offspring production of monoclonal antibodies for introduced; and (3) chimeric animals, their offspring production of monoclonal antibodies for medical use which are of human type and therefore not antigenic in humans type and therefore not antigenic in chammals which express use seeful foreign production of chimeric and cransagenic animals which express use seeful foreign proteins, or which can serve as models for the study of human diseases AAV52755 to AAV52888 are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                            Pluripotent cells containing foreign chromosomes or fragments - and non-
human chimeric animals constructed using them and expressing foreign
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PDZ domain; gene expression; human umbilical vascular endothelial cell;
                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes a method of obtaining pluripotent cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HUVEC, stimulation, tumour necrosis factor; TNF; protein binding; cell; proliferation disorder; cancer; primer; amplification; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 0.8%; Score 14.4; DB 1; Length 20; Best Local Similarity 93.8%; Pred. No. 8.16+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                             Ishida I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Primer 1192-1161 for PDZ domain-containing protein genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR primers used in examples from the present invention
                                                                                                                                               Oshimura M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other
                                                                                                                                                                                                                                                                                          genes such as human antibiotic genes.
                                                                                                                                               Hanaoka K,
                                                                                                                                                                                                                                                                                                                                         Example 1; Page 34; 217pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX29918 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    356 CTGATGGGGAGAGTGA 371
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98JP-00189944.
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  98WO-JP000860
                                               97JP-00062309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGATGGTGAGAGTGA 20
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                                                                                                                                             Yoshida H,
                                                                                               BEER KK
                                                                                                                                                                                          WPI; 1998-480821/41
                                                                                               (KIRI ) KIRIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
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                                                  28-FEB-1997;
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02-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-JUL-1999
                                                                                                                                             romizuka K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
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which encodes a new protein containing PDZ domains whose expression in human umbilical vascular endothelial cells (HUVEC) is enhanced by stimulation with tumour necrosis factor (TNF) alpha. The new protein is used to identify proteins which bind to it (particularly to the PDZ domains) and the genes encoding them, for use in the treatment of cell proliferation disorders such as cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           density gene chip, specifically for making high-density micro-array of oligonucleotide probes. An oligonucleotide probe selecting process to seek preferentially length variable and coverage variable probes is provided to ensure identical cross melting temperature of probes is maximum limit, and this can make the cross control of gene chip relatively simple and raise the reliability of the gene chip detecting results. The process proposes a specific probe selection method for detecting target sequence directly, detecting mutation in both specific and non-specific sites and a probe overall arrangement scheme. AAA79738 to AAA880201 represent oligonucleotide probe sequences which are used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes a method which comprises making a high-
                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection; mutation; high-density gene chip; ss.
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                                                                                                                                                      0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; ative 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hepatitis B virus related oligonucleotide probe #10.
                                                                                                                         Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 8 A; 1 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             High-density gene chip making process.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            examples from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; Fig 15; 19pp; Chinese.
                                                                                                                                                                                                                              895
                                                                                                                                                                                                                                                                                                                                                    AAA79747 standard; DNA; 20 BP
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                                                                                                                                                                                                                                                               18 GACTGTGGGGACCATCA 3
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                                                                                                                                                                                                                            880 GACTGTGGGAACATCA
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                                                                                                                                                                    Local Similarity
es 15; Conserv
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les 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lu Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CN1252452-A
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                                                                                                                                                                                                                                                                                                                                                                                      AAA79747;
                                                                                                                                                         Query Match
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Matches
                                                                                                                                                                                                                                                                                                                   RESULT 791
                                                                                                                                                                                            Matches
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(a) Fusing a microcell comprising the foreign chromosome or chromosome fragment, with a cell having a high efficiency for homologous recombination; (b) marking the desired site of insertion of the foreign chromosome using a targeting vector; and (c) inducting deletion or translocation at the marked site. Transgenic animals produced by the method are useful to provide disease models and knockout animals, and in the production of human proteins, particularly human antibodies. This sequence is used in the method of the invention
                                                                                                                                       Foreign chromosome; microcell fusion; homologous recombination; antibody; targeting vector; transgenic animal; disease model; knockout animal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Producing a cell containing modified foreign chromosomes, useful for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NO: 14.
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                                                                                                         Primer 2 for human immunoglobulin kappa variable region gene Vk1-2.
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phosphorothioate backbone; infection; inflammation; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human E2F transcription factor 3 mRNA antisense sequence SEQ ID
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33.8%; Pred. No. 8.1e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                Oshimura M, Ishida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 55; 316pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                Yoshida H, Hanaoka K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             generation of transgenic animals.
              AAA09925 standard; DNA; 20 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               356 CTGATGGGGAGAGTGA 371
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                                                                                                                                                                                                                                                                                                                                   98JP-00236169.
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                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15; Conservative
                                                                                                                                                                      PCR primer; human; ss.
                                                                                                                                                                                                                                                                                                                                                                (KIRI ) KIRIN BEER KK
                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-246479/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                     WO200010383-A1.
                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                   23-AUG-1999;
                                                                                                                                                                                                                                                                                                                                   21-AUG-1998;
                                                                           05-JUL-2000
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                                                                                                                                                                                                                                                                                                                                                                                                romizuka K,
                                                                                                                                                                                                                                                                    02-MAR-2000.
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                                              AAA09925;
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AAA09925
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The present sequence is human secreted Frizzled-related protein 4 (sFRP4) gene specific reverse transcription PCR (RT-PCR) primer. The invention relates to a method for treating or preventing chronic obstructive pulmonary disease (COPD) such as emphysema, asthma and chronic bronchitis in a subject. The method involves administering to the subject, an agent effective to inhibit apoptosis by inhibiting the expression of a secreted Frizzled-related protein (sFRP) gene. It is also useful in antisense
                                                                                                                  The present invention provides a number of oligonucleotides which selectively hybridise to either Vibrio parahaemolyticus. Escherichia coli or Staphylococcus aureus genes. These organisms are associated with food poisoning, and the sequences can be used to determine its cause and thus determine the appropriate treatment. The present sequence is one of the
labile genes of toxigenic Escherichia coli, useful as primers for gene amplification to detect E. coli in cases of food poisoning, diarrhea or in food inspection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Inhibition of apoptosis for the treatment or prevention of obstructive pulmonary disease comprises inhibiting expression of secreted Frizzled-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Secreted Frizzled-related protein, sFRP; chronic bronchitis; asthma, chronic obstructive pulmonary disease; COPD; antisense therapy; human; emphysema; reverse transcription PCR; RT-PCR primer; sFRP4 gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.4; DB 1; Length 20; Pred. No. 8.1e+02;
                                                                                                                                                                                                                                                                                            0.8%; Score 14.4; DB 1; Length 20; 33.8%; Pred. No. 8.1e+02;
                                                                                                                                                                                                                                                                                                                                1; Indels
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                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human sFRP4 gene specific reverse RT-PCR primer.
                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   related protein gene in lung cells.
                                                                                    Example 2; Page 29; 122pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; Page 35; 79pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                       224 ATGAGAGTGGTGG 239
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                                                                                                                                                                                                                                                                                                                93.8%;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-NOV-2001
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                                                                                                                                                                                                                       probes of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  phosphorothioate backbones directed at the human E2F transcription factor 3 (E2F-3) coding sequences. These can be used in the therapy of diseases which can be treated by modulating E2F-3 expression and to prevent infection, inflammation and tumour formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Υ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New oligonucleotides that are selectively hybridizable with the heat-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                Novel antisense compounds targeted to E2F transcription factor 3 for diagnosis, prophylaxis and treatment of diseases associated with E2F transcription factor 3 such as infection, inflammation or tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shirasaki
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    coli; Vibrio parahaemolyticus; Staphylococcus aureus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention provides antisense oligonucleotides with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nishimura N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               parahaemolyticus detection probe SEQ ID NO: 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ozaki H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                             Claim 14; Col 41-42; 41pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fukushima S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ,0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92JP-00030755.
92JP-00066082.
92EP-00307606.
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                                                                                                                            24-FEB-2000; 2000US-00513729
                                                                                                                                                              24-FEB-2000; 2000US-00513729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAF58946 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGAAGCAGTACCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cregaecaeraceres
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        food poisoning; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              parahaemolyticus.
                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SHMA ) SHIMADZU CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-246903/26.
                                                                                                                                                                                                                                                                            WPI; 2001-101698/11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tada J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
Les 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EP1085100-A1
             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-MAR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-AUG-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Escherichia
                                                 US6165791-A
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                                                                                      26-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-MAR-2001
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                                                                                                                                                                                                                                                                                                                                                                       formation
                                                                                                                                                                                                                                         Popoff I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                862
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vibrio
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 794
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WPI; 2001-381671/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
        Transplastome;
psbA gene; PCR
                                                     WO200142441-A2
                                    Oryza sativa.
                                                                                                           08-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                   chloroplasts
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-MAR-2001
                                                                        14-JUN-2001
                                                                                                                                                                                                                        recipient.
                                                                                                                                                        Reddy S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAC92716;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 798
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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                                                                                                                                                                                                                                                                                                                                                          New oligonucleotides that are selectively hybridizable with the thermostable enterotoxin genes of enterotoxigenic Escherichia coli, useful as primers for gene amplification to selectively detect E. coli in
                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention provides a number of oligonucleotides which selectively hybridise to either Vibrio parahaemolyticus, Escherichia coli or Staphylococcus aureus genes. These organisms are associated with food
                                                                                                                                                                                                                                                                                                                                                                                                                                                      poisoning, and the sequences can be used to determine its cause and thus determine the appropriate treatment. The present sequence is one of the probes of the invention
                                                                                                                                                                                                                                                                                                                 Shirasaki Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
 Gaps
                                                                                                                                                        Escherichia coli; Vibrio parahaemolyticus; Staphylococcus aureus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                 Nishimura N,
Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
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                                                                                                                                      parahaemolyticus detection probe SEQ ID NO: 6.
                                                                                                                                                                                                                                                                                                                 Ozaki H,
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rice promoter specific primer SR15.
                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 29; 120pp; English
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                                                                                                                                                                                                                                                         92JP-00030755.
92JP-00066082.
92EP-00307606.
                                                                                                                                                                                                                                                                                                                 Tada J, Fukushima
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  239
                  335 ACGAGGACTTGAAGAT 350
                                                                                                                                                                                                                                         20-AUG-1992; 2000EP-00125532.
                                 ATGAGGACTTGAAGAT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                AAF58888 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  224 ATGAGAGTGGTGGTGG
                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGAGAGTGGTAGTGG
                                                                                                                                                                   food poisoning; probe; ss
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAH22485 standard; DNA;
                                                                                                                                                                                   Vibrio parahaemolyticus.
                                                                                                                                                                                                                                                                                                                                                                                         cases of food poisoning
                                                                                                                                                                                                                                                                                              (SHMA ) SHIMADZU CORP
                                                                                                                                                                                                                                                                                                                                            WPI; 2001-246904/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-AUG-2001
                                                                                                                                                                                                                                                           18-FEB-1992;
                                                                                                                                                                                                                                                                   24-MAR-1992;
20-AUG-1992;
                                                                                                                                                                                                     3P1085101-A2
                                                                                                                     06-JUN-2001
15;
                                                                                                                                                                                                                        21-MAR-2001
                                                                                                                                                                                                                                                                                                                         Yamagata K;
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                                                                                                   AAF58888;
                                                                                                                                                                                                                                                                                                                 Chashi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 797
                                                                        AAF58888/c
Matches
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ID AAH2
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AC AAH2
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The invention relates to a method of obtaining a stable transplastome, by transforming a recipient plastome (RP) with a polynucleotide having a 5' sequence homologous to a region of RP, and joined to it, a sequence heterologous to RP comprising a coding region operably linked to regulatory region capable of securing expression of coding region in the plastid and joined to it, and a 3' sequence homologous to a region of RP. The method is useful for obtaining a transplastomic plastid, amyloplast, transforming a plastome within a plastid such as proplastid, amyloplast, chromoplast, etoplast or leucoplast, preferably chloroplast. The method is useful for obtaining a transplastomically expressed protein. The
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       method provides high, uniform, reliable expression of transgenes in plants, with stable inheritance of the trait by avoiding the potential for the dangerous spread of transgenes to the ecosystem. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Obtaining a stable transplastome for producing a transplastomic cell, plant or seed, comprises transforming a recipient plastome with a polynucleotide comprising a 5' and 3' sequence homologous to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence represents a PCR primer used in primer extension assays for analysis of transcription initiation from rice promoters in tobacco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human Nck-2 phosphorothioate antisense oligonucleotide, SEQ ID NO:77.
plastome; plastid; chloroplast; transgene; plant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ITGE-) INT CENT GENETIC ENG & BIOTECHNOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ferraiolo G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 8; Page 113; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sadhu L, Shukla V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1186 ATGGCCACAGGCCGTC 1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAC92716 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                            08-DEC-2000; 2000WO-EP012446.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99GB-00029075
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                                               primer; ss.
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Ward DT,

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The present invention provides the sequences of a number of oligomucleotides which selectively hybridise to the Staphylococcus aureus enterotoxin A, B, C, D or E genes. Also provided are the sequences of probes for Escherichia coli and Vibrio parahaemolyticus genes. These useful in the identification of the cause of food poisoning in humans,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genes and proteins involved in the upstream of the pathway of degradation
                                                                                                                                                                                                                                                                          New oligonucleotides that are selectively hybridizable with the entA, B, C, D or E gene of Staphylococcus aureus, useful as primers for gene amplification to selectively detect S. aureus in cases of food poisoning or in food inspection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to coding sequences for proteins such as aromatic dihydrodiol dehydrogenase, aromatic diol oxygenase, hydratase-
                                                                                                                                                                        Shirasaki Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aldehyde-dehydrogenase; enzyme; phenanthrene; anthracene; PCR primer; aromatic dihydrodiol dehydrogenase; aromatic diol oxygenase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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0
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                                                                                                                                                                        Nishimura N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                        Ozaki H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                        Example 2; Page 29; 121pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 4; Page 7; 47pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          food inspection procedures
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of a polycyclic aromatic compound
                                                                                                                                                                     Tada J, Fukushima S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                        92JP-00030755.
92JP-00066082.
92EP-00307606.
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20-AUG-1992; 2000EP-00125530
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15; Conservative
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                                                                                                                             (SHMA ) SHIMADZU CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sp. KP7
                                                                                                                                                                                                                                    WPI; 2001-259596/27.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
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                                        18-FEB-1992;
24-MAR-1992;
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                                                                                  20-AUG-1992;
                                                                                                                                                                   Ohashi T, T
Yamagata K;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequences AAC92649-C92728 represent antisense oligonucleotides targetted to the human NGK-2 gene, which inhibit its expression. The antisense coligonucleotides were designed to target different regions of the human NGK-2 mRNA, and were analysed for their effect on NGK-2 mRNA levels by quantitative real-time PCR. NGK-2 (also known as NGK adapter protein, NGK-2 mRNA levels by Gunations as an adapter protein in integrin—mediated and receptor tyrosine kinase-mediated signal transduction, particularly in growth factor receptor signalling and integrin signalling via its interaction with PINCH, a Lill domain-containing adapter protein which is interaction with PINCH, a Lill domain-containing adapter protein which is involved in integrin, growth factor and Wnt signalling pathways. NGK-2 also interacts with REF (epidermal growth factor) and NGF- and PDGF (platelet. derived growth factor) receptors, inhibiting EGF- and PDGF-stimulated DNA synthesis in an SH2-dependent manner. NGK-2 is also able to interact with C whall, Ras and Sos proteins to induce transcriptional activation, and is therefore implicated in the development of cancer, particularly leukaemia and breast cancer. The oligonucleotides of the invention are useful for enteraction, such as leukaemia and hyperst cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                             Novel antisense compound which inhibits expression of human nck-2 useful for treating disease or condition associated with expression of nck-2, and as research reagents, kits and diagnostics.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            expression, such as leukaemia and breast cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Col 41-42; 38pp; English
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ID AAF79782 standard; DNA; 20
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                                                                                                                                                                                                                  PHARM INC.
                                                                                                                                                                                                                                                                                                   WPI; 2001-090480/10.
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Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                  SISI (-SISI)
      Homo sapiens.
                                                                                                                                                                          19-NOV-1999;
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                                                                                                                               19-NOV-1999;
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AAF79782

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Mismatches

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Matches

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Score 14.4; DB 1; Length 20; Pred. No. 8.1e+02;
 0.8%;
 Query Match
Best Local Similarity
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this patent is not represented in the printed specification but is based on sequence information supplied to Derwent by the European Patent Office

Sequence 20 BP; 1 A; 1 C; 11 G; 7 T; 0 U; 0 Other;

0.8%; Score 14.4; DB 1; Length 20;

The patent discloses a method of producing a protein of interest which involves expressing a polynuclectide fusion construct in a plastid to produce a fusion protein comprising the protein of interest where the construct comprises a polynuclectide coding sequence of the protein of interest operably linked to a polynuclectide coding sequence of a fusion protein pattner. The methods of the invention are useful for producing a protein of interest which comprises a human protein or its biologically active variant or fragment, a pharmaceutically active protein, an IFN (interferon), its biologically active variant or fragment, a human IFN-camma or its biologically active variant or fragment, a human IFN-camma or its biologically active variant or fragment, a human IFN-camma or its biologically active variant or fragment, a human IFN-camma or its biologically active variant or fragment, a human IFN-camma or its biologically active variant or fragment. They are useful for the generation of transplastomic plant calls, plants and useful for the manufacture of a medicament for treating a disease condition. The present DNA sequence is a primer related to the method of 0 aldorase and aldehyde-dehydrogenase (ABA01198-ABA01201 and AAM52344-AAM22347), which are involved in the degradation of polycyclic aromatic compounds. The enzymes are useful as reagents for converting the metabolite intermediates of polycyclic aromatic compounds such as phenanthrene and anthracene. The present sequence is a PCR primer, which and Gaps Producing a protein of interest, e.g., a pharmaceutically active pro comprises expressing a polynucleotide fusion construct in a plastid producing a fusion protein comprising the protein of interest. Primer #13 related to the method of producing a desired protein. Transgenic plant; transplastomic plant; medicament; primer; ss. ; 0 0.8%; Score 14.4; DB 1; Length 20; 33.8%; Pred. No. 8.1e+02; ive 0; Mismatches 1; Indels was used in an example from the present invention Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other; Sequence 20 BP; 1 A; 9 C; 4 G; 6 T; 0 U; 0 Other; CENT GENETIC ENG & BIOTECHNOLOGY Disclosure; Page 75; 92pp; English 0; producing a protein of interest 멾 921 CCTGTTCCAGCTGCTC 936 CCTGCTCCAGCTGCTC 16 13-JUL-2001; 2001WO-EP008132 14-JUL-2000; 2000GB-00017397 93.8%; AAD29525 standard; DNA; 20 (first entry) Conservative WPI; 2002-171810/22. Reddy VS, Sadhu L; Local Similarity nes 15; Conserv Unidentified 07-MAY-2002 (ITGE-) INT 24-JAN-2002 AAD29525; Query Match RESULT 801 Matches g 8888888 8

Constructing strains for identifying gene products as effective targets for therapeutic intervention, by inactivating in the strain one allele of a gene and placing other allele of the gene under conditional expression. Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis; signal transduction; DNA replication; cell division; growth; proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss. Claim 36; SEQ ID NO 5572; 167pp + Sequence Listing; English Candida albicans GRACE strain PCR primer SEQ ID NO 5572. 1201 B Boone C, 29-DEC-2000; 2000US-0259128P. 20-FEB-2001; 2001US-00792024. 22-AUG-2001; 2001US-0314050P. 16 26-DEC-2001; 2001WO-US049486. ABZ31353 standard; DNA; 20 (first entry) 1186 ATGGCCACAGGCCGTC 1 Argcccacacaggccgrc (ELIT-) ELITRA PHARM INC. 15; Conservative Roemer T, Jiang B, WPI; 2002-566694/60. Candida albicans. WO200253728-A2. 30-JAN-2003 11-JUL-2002. ABZ31353; RESULT 802 ABZ31353 ò g

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Ohlsen KL;

Bussey H,

Capture oligonucleptide Zip ID#87 oligo #9.

(first entry)

15-FEB-2002

ABI93000;

BP.

ABI93000 standard; DNA; 20

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                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel antisense compound that hybridizes and inhibits nucleic acid encoding human glioma-associated oncogene-2, useful for treatment of diseases associated with human glioma-associated oncogene-2.
                                                                                                                                                                                                                                                                                                                              Human, glioma-associated oncogene-2; antisense compound; infection; inflammation; tumour formation, antiinflammatory; antitumour; inhibitor of human glioma-associated oncogene-2 expression; antisense gene therapy; phosphorothioate; ss.
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                      Indels
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 d. No. 8.1e+02;
Mismatches 1;
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                                                                                                                                                                                                                                                                                                Chimeric phosphorotioate oligonucleotide #12.
 93.8%; Pred.
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                                                                                                                                                                                                                                                            (first entry)
                                                        230 GTGGTGGTGGTGGCGG
Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
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Consideration probe (17) with injoints with interference missing interference probe (17) with injoint an arrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents of Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus funkgautus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour supplicasor genes or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and inference method in the support at the entity of the support at the contraction microscope and inference method inference method in the support at the support at the support at the support and second sec
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                                                                                                                                                                                                                     Human: K-ras, PCR primer; probe, capture probe, mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes a method (M1) for designing capture oligonuclectide probes (I) for use on a support to which complementary oligonuclectide probes (II) will hybridise with little mismatch, where
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33.8%; Pred. No. 8.1e+02;
Ive 0; Mismatches 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 5; Fig 29; 300pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              844 GAGTACCTGGACAAGG 859
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-034366/04
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
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The invention relates to a novel polynucleotide isolated and purified from a human gene having any one of 935 fully defined sequences as given in specification, or a sequence having a base substitution. The invention further relates to: an oligonucleotide containing single nucleotide polymorphisms; a PCR primer set chosen from the combination of two DNA fragments from any one of 1220 fully defined sequences as given in specification, a labelling probe containing the SNP containing oligo, and a microarray equipped with the SNP containing oligo. The isolated human gene of the invention is useful for detecting the single nucleotide polymorphisms in human gene. The isolated human gene is also useful for diagnosis of disease and determination of side effect to a medical agent. The isolated human gene is also effective in detecting single nucleotide polymorphisms in a human gene. This polymorleotide sequence represents one of the PCR primers used in the single nucleotide polymorphism
                                                                                                                                                                                                                                                       Novel polynucleotide useful for detecting single nucleotide polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human, antisense, lung dysfunction, nasal airway dysfunction, antiinflammatory steroid, ubiquinone, antiinflammatory, antiallergic; antiinflammatic; hypotensive; offerseive, cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; ive 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                        Claim 2; SEQ ID NO 1532; 704pp; Japanese
                                                                                                                                                              (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               detection method of the invention.
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                                                                   12-FEB-2002; 2002JP-00034717.
                                                                                                                 12-FEB-2002; 2002JP-00034717.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 GAGATTGGGTTTGGGA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABZ84889 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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Best Local Similarity 93.8
Matches 15, Conservative
                                                                                                                                                                                                          WPI; 2003-820454/77
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                                                                                                                                                                                                                                                                               in human gene.
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                        26-AUG-2003.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABZ84889;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 807
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the nucleic acid encoding transforming growth factor beta (TGF-beta) receptor II. The antisense oligonucleotides of the invention are useful for treating: hyperproliferative disorders (e.g. breast cancer), or an autoimmune disorder (e.g. rheumatoid arthritis). The present DNA sequence represents a 2'-O-methoxyethyl gapmer oligonucleotide with a phosphorothioate backbone that is targeted to mouse TGF-beta receptor II.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention comprises antisense oligonucleotides that are targeted to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New compound having a sequence targeted to a nucleic acid encoding
Transforming growth factor beta-receptor II, useful for preparing a
composition for treating hyperproliferative disorder e.g., lung, liver,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              human; single nucleotide polymorphism; microarray; side effect; ss;
                                                                                                                                                                                                          transforming growth factor beta receptor II; TGF-beta receptor II; hyperproliferative disorder; breast cancer; autoimmune disorder; rheumatoid arthritis; 2'-O-methoxyethyl gapmer;
                                                                                                                                         Mouse TGF-beta receptor II targeted antisense oligonucleotide #8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Single nucleotide polymorphism detection primer, SEQ ID No 1532.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 3; SEQ ID NO 105; 141pp; English.
                                                                                                                                                                                                                                                                             phosphorothioate backbone; ss; murine
                                                                                                                                                                                      antisense oligonucleotide;
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ADC65809 standard; DNA; 20
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                                                                                           (first entry)
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Best Local Similarity 93.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       colon or gastric cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wyatt JR;
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composition

Murray SF,

primer; PCR

ADF87949;

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RESULT 806 ADF87949 Synthetic

03-JAN-2003

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Gaps

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The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonuclectide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, cue in antisense gene therapy. The composition may have a cue in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also contiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine antiinflammatory steroid in a subject, for reducing or depleting levels of, or receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung allergies, or a respiratory disease or condition.

Note: The sequence data for this patent is not represented in the printed and condition.
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                                                                             Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; antisense; lung dysfunction; nasal airway dysfunction; antilnflammatory steroid; ubiquinone; antilnflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
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                                                                                                                                                                                    Claim 15; SEQ ID NO 131; 872pp; English.
Shahabuddin S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sandrasagra A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human oligonucleotide sequence.
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Best Local Similarity
                                        WPI; 2003-229219/22
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Tang L,
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Miller S,
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The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the intiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 mucleotides of junctions of genes encoding a polypeptide associated with lung and/or assal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a cuse in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antisinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung surfactant in a subject's tissue, or treating bronchoconstriction, lung surfactant in a subject's tissue, or treating bronchoconstriction, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO cat fip.wipo.int/pub/published_pct_sequences
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                                                                                     Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                      Disclosure; SEQ ID NO 2752; 872pp; English.
Shahabuddin S;
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Tang L,
                                            WPI; 2003-229219/22
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Miller S,
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Pharmaceutical composition for treating allments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            immunosuppressive, and cycostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing sensitivity to adenosine, reducing levels of adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of using inflammation, lung allergies, or a respiratory disease or condition, Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPPO
                                                                                                                                                                                                                                                                               The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonuclectide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or mastal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                      Claim 15; SEQ ID NO 258; 872pp; English
                                                    WPI; 2003-229219/22
Tang L,
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Gaps ; Score 14.4; DB 1; Length 20; Pred. No. 8.1e+02; 0; Mismatches 1; Indels Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other; 0; 1171 TGCATCTTCTATGAGA 1186 0.8%; Conservative Query Match Best Local Similarity Thes 15; Conserve à

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ABZ77435 standard; DNA; 20 BP ហ 20 TGCATCCTCTATGAGA ABZ77435; RESULT 810 ABZ77435 q

PCR primer used to amplify Ngn2 cDNA. (first entry) 28-MAY-2003 

23-APR-2002; 2002WO-US013143.

WO200285309-A2 Homo sapiens

31-OCT-2002

24-APR-2001; 2001US-0286036P. (EPIG-) EPIGENESIS PHARM INC.

Immortalized cell; progenitor cell; neural progenitor cell; brain injury; spinal cord injury; Ngn2; PCR; primer; ss.

Synthetic

WO2003014320-A2.

10-AUG-2001; 2001US-0311626P

09-AUG-2002; 2002WO-US025389

(CORR ) CORNELL RES FOUND INC

Goldman SA,

WPI; 2003-256571/25.

Immortalizing neural progenitor cells useful in treating injuries (e.g.

ò The specification describes a method of immortalizing progenitor cells, including neural progenitor cells. The method comprises providing a population of progenitor cells and immortalizing the population of the progenitor cells either before or after they are enriched or purified. The method is useful in immortalizing neural progenitor cells that may be used in treating injuries (e.g. brain or spinal cord injuries) and other diseases. PCR primers ABZ77435-36 were used to amplify cDNA encoding Ngn2 respiratory distress syndrome; allefgic rhinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer. respiratory tract inflammation; adenosine sensitivity; lung; cancer; verifactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; brain or spinal cord injuries), comprises providing a population of progenitor cells and immortalizing the cells before or after they are enriched or purified. Gaps Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; . 0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; tive 0; Mismatches 1; Indels Human myosin X-derived oligonucleotide SEQ ID 2752. Sequence 20 BP; 5 A; 8 C; 2 G; 5 T; 0 U; 0 Other; from immortalized cells of the invention Example 5; Page 23; 55pp; English. 1675 GCCCCCAACTACATCT 1690 BP 4 GCCCACACTACATCT 19 ABD23740 standard; DNA; 20 (first entry) Conservative Local Similarity Les 15; Conserv 29-JUL-2004 ABD23740; Query Match RESULT 811 ABD23740/c Matches F F F X 8 X 0 0 0 0 0 0 0 0 X 0 g ò

and receptors, This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptor ţ oligonucleotide containing less percentage of adenosine, targeted nucleic acids associated with lung airway or lung dysfunction, and õ Aguilar Pharmaceutical composition for treating asthma, has antisense Pabalan J, Katz E, Claim 15; SEQ ID NO 2752; 763pp; English. Tang L, Shahabuddin S; Li Y, Sandrasagra A, bronchodilating agent WPI; 2003-093058/08. Miller S, Nyce JW,

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surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA. The invention also describes a kit, that comprises: (a) a delivery or lung device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition of the invention has antiallergic, antiinflammatory, antiathmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a certa-adrenergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated the amount of target polypeptide present in the lungs. The colling of a disease or condition such as pulmonary vasconstriction, and or bronchoconstriction are associated distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary therefore the plant of the control of the cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleotides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antiinflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic thinitis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human transglutaminase-derived oligo SEQ ID 131.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           prevent any unwanted effects due to it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Li Y, Sandrasagra A, Ka
Tang L, Shahabuddin S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   713 GACTGGAACATGAAGA 728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABD21119 standard; DNA; 20 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16 GGCTGGAACATGAAGA 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 93.8
Matches 15; Conservative
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Miller S,
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This interaction describes a novel composition of a little derive agent, compositing oil gonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and bronchoconstriction, respiratory tract inflammation, allergies and ceducing adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oil gonucleotides are derived from a gene encoding or regulating of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA.

The invention also describes a kit, that comprises: (a) a delivery of ervice, in separate containers, (b) the oligonucleotides, (c) in the invention has antiallergic, antiinflammatory, antiasthmatic, is the invention as antiallergic, antiinflammatory, antiasthmatic, beta-adrenergic agonist. The composition of vice tatic activity, is a composition comprises oilgo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or to reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or lung
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       inflammation, allergies and/or surfactant hypoproduction are associated with a disease or condition such as pulmonary vasoconstriction, with a disease or condition such as pulmonary vasoconstriction, full and the major as the state of the separation, respirator, transplantation, respirator, cystic fibrosis, allergies pulmonary distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonucleorides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it
                                                                                                                                                                                                                                  invention describes a novel composition (a) a first active agent,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                    oligonuclectide containing less percentage of adenosine, targeted toncleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                        Pharmaceutical composition for treating asthma, has antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.4; DB 1; Length 20;
13.8%; Pred. No. 8.1e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 10 A; 2 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                          Claim 15; SEQ ID NO 131; 763pp; English.
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Best Local Similarity 93.8
Matches 15, Conservative
                                                                                                                  bronchodilating agent.
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148

133 ATGAAGAAGATCAAAC

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ABD21246 standard; DNA; 20 BP. 2 ATGAAGTAGATCAAAC 17 29-JUL-2004 (first entry) ABD21246; RESULT 813 ABD21246, g 

Human; antisense; bronchoconstriction; allergy; hyposecretion; pain; respiratory tract inflammation; adenosine sensitivity; lung; cancer; surfactant depletion; antiallergic; antifilflammatory; antiasthmatic; analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis; beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction; respiratory distress syndrome; allergic fibritis; pulmonary hypertension; emphysema; chronic obstructive pulmonary disease; cancer; bronchitis; pulmonary transplantation rejection; ss; primer.

Human transglutaminase-derived oligo SEQ ID 258.

Homo sapiens.

WO200285309-A2

WPI; 2003-093058/08.

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This invention describes a novel composition (a) a first active agent, comprising oligonucleotides, effective for alleviating bronchoconstriction, respiratory tract inflammation, allergies and reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, surfactant depletion or hyposecretion, when administered to a mammal. The oligonucleotides are derived from a gene encoding or regulating expression of a target polypeptide associated with lung airway or lung dysfunction or cancer and can be anti-sense to the corresponding mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary thypertension, emphysema, chronic obstructive pulmonary disease, pulmonary transplantation rejection, pulmonary infections, bronchitis or cancer. The reduced adenosine content of the anti-sense oligos corresponding to thymidines present in the target RNA serves to prevent the breakdown of the oligonuclectides into products that free adenosine into the system e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to prevent any unwanted effects due to it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention also describes a kit, that comprises: (a) a delivery device, in separate containers, (b) the oligonucleotides, (c) instructions for adding a carrier and for use of the kit. The composition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of the invention has antiallergic, antinflammatory, antiasthmatic, analgesic, hypotensive, immunosuppressive and cytostatic activity, is a beta-adranergic agonist. The composition is useful for preventing or treating a respiratory, lung or malignant disease. The administered composition comprises oligo and is administered to reduce the production or availability, or to increase the degradation of the target mRNA or reduce the amount of target polypeptide present in the lungs. The pulmonary obstruction, and/or bronchoconstriction and/or lung inflammation, allergies and/or surfactant hypoproduction are associated
                                                                                                                                                                                                                                                                                                                     Pharmaceutical composition for treating asthma, has antisense oligonuclectide containing less percentage of adenosine, targeted tnucleic acids associated with lung airway or lung dysfunction, and
                                                                                                                                                                                             Pabalan J, Aguilar D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      with a disease or condition such as pulmonary vasoconstriction,
                                                                                                                                                                                             Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 15; SEQ ID NO 258; 763pp; English.
                                                                                                                                                                                                                     Tang L, Shahabuddin S;
                                                                                                                                                                                                Sandrasagra A,
                                              23-APR-2002; 2002WO-US013143.
                                                                                          24-APR-2001; 2001US-0286036P.
                                                                                                                                            (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                              bronchodilating agent.
                                                                                                                                                                                                                                                                   WPI; 2003-093058/08.
                                                                                                                                                                                           Li Y,
31-OCT-2002
                                                                                                                                                                                           Nyce JW, I
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     device,
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Gaps ., Score 14.4; DB 1; Length 20; Pred. No. 8.1e+02; 1; Indels Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other; Mismatches 0 Query Match 0.8%; Best Local Similarity 93.8%; 15; Conservative Matches

; 0

1171 TGCATCTTCTATGAGA 1186 Ŋ 20 TGCATCCTCTATGAGA

ADI41030 standard; DNA; 20 (first entry) 22-APR-2004 ADI41030; RESULT 814 

Human HGPRBMY41 gene specific antisense primer.

Human; ss; primer; GPCR; G protein-coupled receptor;

reproductive disorder, testicular disorder, vas deferens disorder, spermatogenesis, infertility, XX male, epididymitis, cryptorchidism; sperm transport disorder; testicular cancer; testicular germ cell tumour; male hormone disorder; premature pubberty; Kallman syndrome; Cushing's syndrome; immune disorder; leukaemia; arthritis; asthma, AIDS; rheumatoid arthritis; inflammatory bowel disease; sepsis;
T-cell mediated cytotoxicity; graft-versus-host disease;
autoimmunity disorder; systemic lupus erythematosus;
drug induced haemolytic anaemia; Sjogren's disease;
T-cell maturation disorder; B-cell maturation disorder;
vascular disorder; stroke; ischaemia; mycardial infarction;
atherosclerosis; gastrointestinal disorder; pulmonary disorder;
brain disorder; endocrine disorder; cancer; gene therapy; PCR.

Homo sapiens

US2004018976-A1.

29-JAN-2004.

13-MAY-2003; 2003US-00436715

14-MAY-2002; 2002US-0380336P 

(FEDE/) FEDER J N. (MINT/) MINTIER G.

(RAMA/) RAMANATHAN C S.

Ramanathan CS; Feder JN, Mintier G,

WPI; 2004-122081/12.

New human G-protein coupled receptor polypeptide and polynucleotide, useful for diagnosing, preventing, treating or ameliorating a medical condition, e.g. reproductive disorder, immunodeficiency disease or testicular cancer

Example 4; SEQ ID NO 90; 290pp; English.

The invention relates to an isolated number of proteins whenton relates to an isolated number of the publication of proteins minus the start methionine (and the region of the polynucleotide proteins minus the start methionine (and the region of the polynucleotide concoding this protein region). The proteins are designated HGPRBMY30-1, HGPRBMY30-2, HGPRBMY30-3, HGPRBMY30-3, HGPRBMY41-2, HGPRBMY41-2, HGPRBMY41-3, HGPRBMY41-3, HGPRBMY41-3, HGPRBMY41-3, HGPRBMY41-3, HGPRBMY42-1, HGPRBMY41-1, HGPRBMY41-2, HGPRBMY41-3, HGPRBMY42-1, HGPRBMY41-1, HGPRBMY41-2, HGPRBMY41-3, HGPRBMY42-1, HGPRBMY42-1, HGPRBMY41-2, HGPRBMY41-3, HGPRBMY42-1, HGPRBMY41-2, HGPRBMY41-3, HGPRBMY42-1, HGPRBMY41-1, HGPRBMY41-2, HGPRBMY41-3, HGPRBM granulomatous disease, inflammatory bowel disease, sepsis, acne, neutrophilia, psoriaais, hypersensitivities, such as T-cell mediated cytotoxicity, immune reactions to transplanted organs and tissues, such as host-versus-graft and graft-versus-host diseases, or The invention relates to an isolated human G protein-coupled receptor

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autoimmunity disorders, such as autoimmune infertility, demyelination, systemic lupus erythematosus, drug induced haemolytic anaemia, Sjogren's disease, scleroderma, T-cell maturation disorders, B-cell maturation disorders, B-cell maturation disorders, schools in the accorders, stroke, ischaemia, myocardial infarction, atherosclerosis, embolisms, thrombosis, gastrointestinal disorders, irritable bowel syndrome, ulcers, pulmonary disorders, brain disorders, endocrine disorders, or ovarian, stomach, colon or kidney cancer or its related proliferative condition (many other diseases and disorders are listed in the specification). The antibodies may be used to purify, detect and target the G-protein coupled receptor polypeptides. The polymcleotides are also useful in gene therapy. The present sequence is a gene specific PCR primer for a nucleic acid encoding a novel GPCR of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .20

/*tag base= OTHER

/mote= "All linkages are phosphorothioate linkages and

all cytidines are 5-methylcytidines"

1. .5
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                                                                                                                                                                                                                                              Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
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/mod_base= OTHER
/note= "2'-methoxyethyl residue"
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/note== "2'-methoxyethyl residue"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human EDG5 antisense oligonucleotide ISIS126665.
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                                                                                                                                                                                                                                                                                                                                            956 ACCGCCAGAAGGTGCT 971
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADJ62594 standard; DNA; 20 BP
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Matches 15; Conservative
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modified base
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                                                                                                                                                                                                                                                                                Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 815
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New antisense oligonucleotide targeted to nucleic acid encoding

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The invention relates to a compound 8-80 nucleobases in length targeted to, and which specifically hybridises with a nucleic acid molecule encoding endothelial differentiation gene 5 (EDG5, a G protein coupled receptor, involved in development, wound healing, tissue regeneration, cellular proliferation, apoptosis, cancer, anglogenesis and cellular proliferation, and inhibits the expression of EDG5, i.e. is an antisense of inflammation), and inhibits the expression of EDG5, i.e. is an antisense compound and a carrier or diluent and a method for screening an antisense compound (by contacting a preferred target region of a mucleic acid molecule encoding EDG5 with one or more candidate antisense compounds that inhibit the expression of a nucleic acid encoding EDG5. Compounds that inhibit the expression of a nucleic acid encoding EDG5). The compounds that inhibit the expression of a nucleic acid encoding EDG5). The compound, composition and methods are useful for treating a disease or condition associated with EDG5, such as a hyperproliferative disorder, apoptosis. They are also useful in research and diagnostics for modulating the expression of EDG5. Experimental protocols are described to the contaction are given. The present sequence is an AS oligonucleotide
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endothelial differentiation sphingolipid G-protein-coupled receptor 5, for treating cancer, developmental disorder or a condition arising from aberrant apoptosis.
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Fanconi's aplastic anaemia; Bloom's syndrome; gene therapy;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          growth factor 2 DNA amplifying PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cutaneous melanocarcinoma; intraocular melanocarcinoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 3 A; 6 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                     Example 15; SEQ ID NO 54; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SLOK ) SLOAN KETTERING INST CANCER RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Reddy PT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADM13644 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       169 CGAGGTGGCCGAGGCA 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-FEB-2002; 2002US-0355009P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAGGTGGCCCAGGCA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-FEB-2003; 2003US-00361725.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         targeting human EDG5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Singh B, Reddy PG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2004009541-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCR; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Insulin-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LS-JAN-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                xeroderma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   albinism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADM13644;
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ADM13644/
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Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention provides isolated polypeptides designated oncoseqx and their encoding polymucleotides. The invention is useful for diagnosing, prognosing and developing a therapeutic strategy for the pathology which includes cancer, tumour, carcinoma, sarcoma, blastoma, lymphoma, leukaemia and neoplastic disease. The invention is also useful for treating hyperproliferative disorders, Gardner's syndrome, hereditary exostosis, polyendocrine adenomatosis, Peutz-Jeghers syndrome, hereditary evostosis, polyendocrine adenomatosis, Peutz-Jeghers syndrome, hereditary exostosis, polyendocrine adenomatosis, peutz-Jeghers syndrome, hereditary cumour, cutaneous melanocarcinome, retinoblastoma, carcinoma with the pigmentosum, ataxia telangiectasia, chediak-Higashi syndrome, albinism, pigmentosum, ataxia telangiectasia, Chediak-Higashi syndrome, albinism, cueful in gene therapy. The present sequence is a PCR primer used to amplify insulin-like growth factor 2 DNA. The primer is used in the exemplification of the invention.
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                       Novel isolated Oncoseg polypeptide, useful for developing therapeutic strategy for pathology such as squamous cell carcinoma and fields associated with oncogenesis and tumor progression.
                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "phosphorothioate linkages and all cytidine residues are 5-methylcytidines"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human mPGES-1 chimeric antisense oligonucleotide SEQ ID NO:992.
                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.4; DB 1; Length 20;
13.8%; Pred. No. 8.1e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
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/note= "2'-0-methocyethyls"
16. .20
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                                                                             Example; SEQ ID NO 24; 73pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADM14805 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                 756 AGTGTCCCTGCTCAAG 771
                                                                                                                                                                                                                                                                                                                                                         93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUL-2004 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                      ACTGTCCCTGCTCAAG
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Matches 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                          20
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ADM14805/c
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antidiabetic, immunomodulator, cardiant, neuroprotective, antiinflammatory, neuroprotective, nootropic, antianthritic, vasotropic, ophthalmological, immunomodulatory and cardiovascular activities, and can be used as mPGBS-1 inhibitors and in gene therapy. The antisense compound can be used for preparing a composition for treating a disease or condition associated with mPGBS-1 e.g., inflammation, Alzheimer's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or ophthalmic, immunological, cardiovascular or neurological disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chimeric; antisense oligonucleotide; phosphorothioate; human; microsomal prostaglandin E2 synthase; mFoES-1; mFoES-1 inhibitor; microsomal prostaglandin E2 synthase; mHoES-1; mFoES-1 inhibitor; extostatic; antidiabetic; immunomodulator; cardiant; neuroprotective; antiinflammatory; neuroprotective; antiarthritic; vasotropic; ophthalmological; immunomodulatory; cardiovascular; gene therapy; inflammation; Alzheimer; disease; arthritis; diabetes; cancer; ischaemia; reperfusion injury; ophthalmic disorder; immunological disorder; cardiovascular disorder; neurological disorder; se.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human mPGES-1 gene is located on chromosome 9, more specifically to 9934.3. The present invention also describes: (1) antisense compounds, having a sequence comprising 8-30 bp targeted to a nucleic acid encoding mPGES-1, which specifically hybridise with the nucleic acid mPGES-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal having a disease or condition associated with mPGES-1. MPGES-1 chimeric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense compound, having a sequence targeted to a nucleic acid encoding mPGES-1, useful for preparing a composition for treating e.g. inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antisense oligonucleotides and antisense compounds have cytostatic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 4; SEQ ID NO 992; 132pp; English.
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                                                                                                                                                                     2003WO-US030374.
                                                                                                                                                                                                                                                                 25-SEP-2002; 2002US-0413549P.
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Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                    (PHAA ) PHARMACIA CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-305094/28.
WO2004028458-A2.
                                                                                                                                                                          25-SEP-2003;
                                                                                       08-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                           Gierse JK;
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modified\_base

modified base

modified base

Gierse JK;

ischemia

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The invention relates to a compound 8-80 nucleobases in length targeted to a nucleic acid molecule encoding forkhead box 01A, where the compound is at least 70% complementary to a nucleic acid molecule encoding forkhead box 01A and modulates expression of forkhead box 01A by at least 10%. The compound is useful for treating an animal having a disease or condition associated with forkhead box 01A, e.g. a hyperproliferative disorder (cancer, preferably rhabdomyosarcoma), or type 2 diabetes. This sequence corresponds to an oligonucleotide targeted to the mouse foxhead
                                                                                 ss; cytostatic; antidiabetic; foxhead box OlA inhibitor; forkhead box OlA; hyperproliferative disorder; cancer; rhabdomyosarcoma; diabetes; H-ras gene; antisense; gene expression; primer.
                                                                                                                                                                                                                                                                                              /note= "sugar phosphate internucleotide linkages in the backbone are replaced with a phosphorothioate internucleotide linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New compounds, particularly antisense oligonucleotides, targeted to anucleic acid molecule encoding forkhead box OIA, useful for treating cancer, or type 2 diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'note = "nucleotides are 2'-methoxyethyl-nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note= "nucleotides are 2'-methoxyethyl-nucleotides
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dobie KW, Bhanot S, Veniant-Ellison M, Lindberg RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                   'note= "all C are 5'-methylcytidines'
                                             Mouse foxhead box OlA sequence inhibitory oligo #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  box 01A genes in order to inhibit gene expression
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 18; SEQ ID NO 64; 146pp; English.
                                                                                                                                                                                                                               Location/Qualifiers
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/mod_base=_OTHER
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01-JUL-2004 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16. .20
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*tag=
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(ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                        misc_difference
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                                                                                                                                                                                       Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence represents a chimeric antisense oligonucleotide targeted to human microsomal prostaglandin E2 synthase (mPGES-1). The human meges-1 specifically to chuman meges-1 specifically to open is located on chromosome 9, more specifically to open size located on chromosome 9, more specifically to open size located meges-1 and specifically the specifically hybridise with the nucleic acid meges-1 and inhibits its expression; (2) a method of inhibiting the expression of mPGES-1 in cells or tissues; and (3) a method of treating an animal action and disease or condition associated with meges-1. MPGES-1 chimeric artificiance of inminial animal antisense oligonucleotides and antisense compounds have cytostatic, antidiabetic, immunomodulator, cardiant, neuroprotective, antidiabetic, immunomodulatory and cardiovascular activities, and can computating an engage of antisense of phthalmological, immunomodulatory and cardiovascular activities, and can be used as mPGES-1 inhibitors and in gene therapy. The antisense compound con the used for preparing a composition for treating a disease or condition associated with mPGES-1 e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer, ischaemia or reperfusion injury, or cophthalmic, immunological, cardiovascular or neurological disorder.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     encoding mPGES-1, useful for preparing a composition for treating e.g., inflammation, Alzheimer's disease, arthritis, diabetes, cancer or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense compound, having a sequence targeted to a nucleic acid
                                                                                           /mod_base= OTHER
/note= "phosphorothioate linkages and all cytidine
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; iive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 3 A; 9 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                         residues are 5-methylcytidines
                                                                                                                                                                             /*tag= a /mod_base= OTHER /mod_base= OTHER /note= "2'-0-methocyethyls" 16..20
                                                                                                                                                                                                                                                                                                                             'note= "2'-0-methoxyethyls'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 4; SEQ ID NO 766; 132pp; English
                        Socation/Qualifiers
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nes 15; Conserv
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Conservative
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es 15; Conserv
                                                                                                                                                                                                                                                                                                                                    WO2004030750-A1
                                                                                                                                                                                                                                                                                         Homo sapiens.
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    ò
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MAXEX
MAX
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an antisense compound 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Farnesoid X receptor (FXR), where the antisense compound specifically hybridizes with and inhibits the expression of FXR. The composition and methods are useful for inhibiting the expression of FXR (Farnesoid X receptor) in cells or tissues, or for treating diseases or conditions associated with FXR, such as diabetes, immunological disorders, cardiovascular disorders, e.g. dyslipidemia and its symptoms, atherosclerosis, low HDL (high density lipoprotein), elevated LDL (low density lipoprotein) or hypercholesterolemia, gallstones, hypertriglyceridemia, obesity, composition is used for ischemia/reperfusion injury. In addition, the composition is used for diagnostics, prophylaxis, or as research reagents or faits. This sequence corresponds to an antisense oligonucleotide of the
                                                                                                                                                                                   ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic; antiarteriosclerotic; hepatotropic; litholytic; anorectic; neuroprotective; vasotropic; antisense; gene therapy; Farnesoid X receptor; diabetes; immunological disorder; cardiovascular disorder; dyslipidemia; atherosclerosis; himly density lipoprotein; low density lipoprotein; hydraticylyceridemia; obesity; neurological disorder; gallstones; hypertriglyceridemia; obesity; neurological disorder; ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders,
                                                                                                                                           Farnesoid X receptor gene expression antisense inhibitory oligo #1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides useful for modulating expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.8%; Score 14.4; DB 1; Length 20; 33.8%; Pred. No. 8.1e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; SEQ ID NO 1608; 150pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1658 ACACCCCTCACAGGGC 1673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-SEP-2003; 2003WO-US030353.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93.8%;
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ADO54235 standard; DNA; 20
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                                                                                            (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            e.g. diabetes, immunol
gallstones or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2004-347928/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15;
                                                                                            15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention.
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                                                                                                                                                                                                                                                                        cardiovascular disorder, dyslipidemia; atherosclerosis; high density lipoprotein; hypercholesterolemia; dallstones; hypertriglyceridemia; obesity; neurological disorder; ischemia; reperfusion; diagnostics; prophylaxis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense oligonucleotides useful for modulating expression of Farnesoid X Receptor (FXR) or for treating diseases associated with FXR, e.g. diabetes, immunological disorders, cardiovascular disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        transplant rejection; immune system; rheumatoid arthritis; lupus; inflammatory bowel disease; multiple sclerosis; HIV; AIDS; ss; primer.
Farnesoid X receptor gene expression antisense inhibitory oligo #1828.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                 ss; antidiabetic; immunosuppressive; cardiovascular; antilipemic; antidiatiosclerotic; hepatotropic; litholytic; anorectic; neuroprotective; vasotropic; antisense; gene therapy; Farnesoid X receptor; diabetes; immunological disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 4; SEQ ID NO 1828; 150pp; English.
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21-MAY-2004

the genes

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The present invention relates to antisense compounds targeted to a nucleic acid encoding human/mouse checkpoint kinase 1 (Chk1). The antisense compound comprises an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits the expression of Chk1. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense oligonucleotide is a chimeric oligonucleotide internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified sugar moiety, preferably a 2'.O-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methyloytosine. The antisense oligonucleotides are useful for the treatment of diseases such as
                                                                                                                                                                               New compounds, particularly oligonucleotides targeted to a nucleic acid encoding checkpoint kinase 1, useful for treating diseases associated with checkpoint kinase 1, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "This oligonucleotide has a phosphorothioate backbone and 2'-methyoxyethyl (2'-MOS) wings at the 5' and 3' ends, which are 5 nucleotides in length at each end. All cytidine residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antisense therapy, mouse, checkpoint kinase 1, Chk1; hyperproliferative disorder; cancer; cytostatic; phosphorothioate; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hyperproliferative disorders, e.g. cancer. The present seq
represents mouse Chkl DNA target sequence for an antisense
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.8%; Score 14.4; DB 1; Length 93.8%; Pred. No. 8.1e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seguence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                        Watt AT;
                                                                                                                                                                                                                                                                          Example 16; SEQ ID NO 192; 66pp; English.
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                                                                                        Dobie KW,
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16-NOV-2002; 2002US-00298994.
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                                             (ISIS-) ISIS PHARM INC
                                                                                        Freier SM,
                                                                                                                                      WPI; 2004-430923/40.
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Best Local Similarity
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modified_base
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                                                                                      Gaarde W,
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                                                                                                                                                                                                                                                                                                                                                                                                                                      Diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic islet, lung, bone marrow or stem cell transplant rejection, in an individual, comprises detecting the expression level of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to diagnosing or monitoring transplant rejection, e.g. cardiac or kidney transplant rejection, in an individual comprises detecting the expression level of one or more genes. The methods, system and kits are useful in diagnosing or monitoring transplant rejection, e.g. heart, kidney, liver, pancreas, pancreatic islet, lung, bone marrow or stem cell transplant rejection, xenotransplant rejection or mechanical organ replacement rejection, in an individual. The method is also useful in assessing the immune status of an individual. The methods are also useful in diagnosing and monitoring diseases that involve the immune system, e.g. rheumatoid arthritis, lupus, inflammatory bowel diseases, multiple sclerosis, HIV/AIDS or viral, bacterial or fungal infection. The present sequence represents a primer for a 50 mer oligonucleotide marker for diagnosis and monitoring
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                          Ly N, Prentice J, Morris M;
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13.8%; Pred. No. 8.1e+02;
ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mouse; checkpoint kinase 1; Chk1; disorder; cancer; cytostatic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mouse checkpoint kinase 1 DNA target sequence #23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      allograft rejection and other disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 58; SEQ ID NO 1675; 1762pp; English.
                                                                                                                                                                                                                                                                                                                       Fry K, Woodward R,
                                                                                                                                                                                                                                                                          (EXPR-) EXPRESSION DIAGNOSTICS INC.
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                                                                                                                                                              24-APR-2003; 2003WO-US012946.
                                                                                                                                                                                                                                 2002US-00325899
                                                                                                                                                                                                         24-APR-2002; 2002US-00131831
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hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                                                   WO2004042346-A2.
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                                                                                                                                                                                                                                                                                                                       Wohlgemuth J,
                       Homo sapiens
                                                                                                                                                                                                                                 20-DEC-2002;
                                                                                                                                                                                                                                                                                                                                                  Rosenberg S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus
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Query Match

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The present invention relates to antisense compounds targeted to a mucleic acid encoding human/mouse checkpoint kinase 1 (Chk1). The antisense compound comprises an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits the expression of Chk1. The antisense oligonucleotide is a chimeric oligonucleotide. The antisense oligonucleotide comprises at least one modified internucleoside linkage, preferably a phosphorothicate linkage. It also comprises at least one modified sugar moiety, preferably a 2'-0-methoxyethyl (2'-MOE) sugar moiety. The antisense oligonucleotide further comprises at least one modified nucleobase, preferably a 5-methyloytosine. The antisense oligonucleotides are useful for the treatment of diseases such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mouse; forkhead box O1A; ss; antisense oligonucleotide;
hosphorothioate linkage; 2.-O-methoxyethyl sugar moiety;
5-methylcytosine; hyperproliferative disorder; cancer; rhabdomyosarcoma;
type 2 diabetes; cytostatic; antidiabetic.
                                                                                  New compounds, particularly oligonucleotides targeted to a nucleic acid encoding checkpoint kinase 1, useful for treating diseases associated with checkpoint kinase 1, e.g. hyperproliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New compounds, particularly antisense oligonucleotides, targeted to a
                                                                                                                                                                                                                                                                                                                                                                            hyperproliferative disorders, e.g. cancer. The present sequence represents an antisense oligonucleotide used in the examples of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Shutter JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mouse forkhead box O1A DNA antisense oligonucleotide #8.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                Seguence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
                 Watt AT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Veniant-Ellison M,
                                                                                                                                                  Example 16; SEQ ID NO 85; 66pp; English
                Dobie KW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1031 CTGACTTTGGCCTGGC 1046
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match
Best Local Similarity 93.8°
Matches 15; Conservative
                Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LINDBERG R A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dobie KW, Bhanot S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SHUTTER J R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-389194/36
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                                                                                                                                                                                                                                                                                                                                                                                                                present invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JS2004097459-A1.
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                Saarde W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADN40710;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 825
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The invention relates to a compound targeted to a nucleic acid molecule encoding the human forkhead box OlA polypeptide. The compound is an antisense oligonucleotide that specifically hybridises with the nucleic acid and inhibits expression of the polypeptide. The antisense oligonucleotide comprises at least one modified internucleoside linkage i.e. a phosphorothicate linkage, at least one modified sugar moiety, preferably a 2'-O-methoxyethyl sugar moiety, or at least one modified nucleobase comprising a 5-methylcytosine. The antisense compounds are useful for modulating the expression of the human forkhead box OlA polypeptide and in preparation of a composition for treating hyperproliferative disorders, e.g. cancer, preferably rhabdomyosarcoma, and type 2 diabetes. This sequence represents an antisense oligonucleotide targeted to DNA encoding the mouse forkhead OlA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Counteracting pathologic change in beta-adrenergic signal transduction pathway, by administering compound capable of inhibiting transforming growth factor-beta (TGF-beta) signaling through TGF-beta receptor, to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      failure;
disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ss; primer; respiratory; central nervous system; antiasthmatic; antimicrobial; cardiovascular; beta-adrenergic signal transduction pathway; transforming growth fartansduction pathway; transforming growth disease; heart disease; congestive heart failure; bronchoconstrictive disease; heart disease; congestive heart failure; emphysema; chronic bronchitis; chronic obstructive pulmonary disease; pulmonary edema; cystic fibrosis; occlusive lung disease; acute respiratory deficiency syndrome; asthma; radiation-induced injury of lung; lung injury; inhaled toxin; aging;
  acid molecule encoding forkhead box OIA, useful for treating
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human/rat betal-adrenergic receptor gene forward PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%; Score 14.4; DB 1; Length 20;
93.8%; Pred. No. 8.1e+02;
ve 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 2 A; 3 C; 9 G; 6 T; 0 U; 0 Other;
                                                         Example 18; SEQ ID NO 64; 80pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1383 CGACCTCCTCACCAAG 1398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                         polypeptide of the invention.
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18-SEP-2003; 2003US-0504585P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          93.88;
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                    cancer, or type 2 diabetes.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 93.8 tes 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       adrenergic receptor.
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nucleic
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NANBHV primer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-NOV-1993.
                                                                                                                                                                                                                                                                                                                                                        invention,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
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                                                 The invention relates to a method for counteracting (MI) a pathologic change in the beta-adrenergic signal transduction pathway which involves administering a compound (I) capable of inhibiting transforming growth factor-beta (TGF-beta) signaling through a TGF-beta receptor, to a derenergic signal transduction pathway. (MI) is useful for counteracting a pathologic change in the beta-adrenergic signal transduction pathway, (MI) is useful for counteracting a pathologic change results in disease or condition benefiting carpathologic change results in disease or condition benefiting where the pathologic change results in disease or condition is concentrative. The disease or condition is chosen from emphysema, chronic failure. The disease or condition is chosen from emphysema, chronic bronchits, chronic obstructive pulmonary disease (CDF), pulmonary disease (CDF), asthma, radiation-induced injury of lung, undied toxins, circulating from other factors such as infectious causes, inhaled toxins, circulating exogenous toxins or aging, and genetic predisposition to impaired lung function. In an example of the invention, counteract pathologic changes in the beta-adrenergic signal transduction can pathway. Expression of adrenergic receptor genes were then analysed by CCF counteract pathologic changes in the beta-adrenergic signal transduction counteract pathologic changes in the pathologic changes in the pathologic changes in the pathologic changes i
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cytostatic, Pre-B-cell transformation related gene; PBX; HOX; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 8.1e+02; tive 0; Mismatches 1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HOX heptapeptide region; RT-PCR; primer; ss; HOXA4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the human and rat betal-adrenergic receptor genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seguence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pettengell R, Forraz NPB,
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                     Example 1; SEQ ID NO 4; 139pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 93.8%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-533662/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              especially cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2004055049-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Morgan RGL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Use of pep
dependent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADQ26572;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 827
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transformation relates to peptides which impair Pre-B-cell transformation related gene (PBX)-dependent regulation of gene transformation, since they mimic the region of HOX to which PBX binds and cut as antagonists of that binding. The peptides are based on the hexapeptide region of HOXB-4 but have been found to have cross-reactivity and reduce the binding of PBX to all HOX proteams. The peptides are useful for manufacturing a medicament for the treatment or prevention of a disorder in which aberrant cell division occurs e.g. cancer. The peptides also better comprises a cell penetration moiety that is linked insectly to the carboxy-terminal of the peptide. The peptides are also useful for reducing the side effects of a cytotoxic or chemotherapeutic general cells, which are originally derived from the recipient in vivo. The stem cells, which are originally derived from the treatment or prevention of a condition resulting in a decreased level of stem cells, such as a condition resulting from chemotherapy or radiotherapy. The present sequence is a RT-PCR which was used in an example from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The DNA sequences (AAQ50623-28) are obtained by extracting RNA from liver or serum of a parient or chimpanzee infected with NANBHY, synthesising cDNA and detecting the gene fragment which is negative to anti-HCV antibody and cloning the fragment. The derived proteins (AAR44404-08) can be used to detect NANBHY. The DNA and protein are useful in the treatment or prophylaxis of non-A, non-B hepatitis. The primers (AAQ50629-30) are used in the amplification process
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hepatitis virus gene for corresp. polypeptide - used in treatment and prophylaxis of non-A, non-B-hepatitis, for encoding specified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NANBHV; non-A non-B hepatitis virus; prophylaxis; liver; serum;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.4; DB 1; Length 20; 33.8%; Pred. No. 8.1e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 21 BP; 5 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 5; 11pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (DAUC ) DAIICHI KAGAKU YAKUHIN KK.
(DAUC ) DAIICHI PHARM CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          131 GGATGAAGAAGATCAA 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92JP-00088840.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGATGAAGAAGATCCA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92JP-00088840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAO50630 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1993-382212/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aminoacid sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
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XX
SQ Sequence 21 BP; 3 A; 14 C; 2 G; 2 T; 0 U; 0 Other;

Query Match

Query Match

Best Local Similarity 93.8%; Pred. No. 8.4e+02;

Matches 15; Conservative 0; Mismatches 1; Indels

Qy 1158 GTGGGTTGGGCTGC 1173

Db 17 GTGGGTTGGGCTGC 2
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.; 0

Gaps

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AAI73045 standard; DNA; 21 BP

AAI73045 ID AAI7

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RESULT 830
              AAF96904
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequences shown in AAV57601 to AAV57686 represent primers used for the PCR amplification of the exons of the different submits of the human pepthedial sodium channel (ENac) gene. This is used in the method of the invention of determining the presence or absence of a mutation conferring a pathological condition mediated by altered ion transport. The method comprises analysing a nucleic acid sample, or protein sample, for the presence of a mutation in the ENAC gene, or in its encoded protein. A vector containing a nucleic acid encoding a human altered variant of the ENAC protein can be used to transform host cells to produce an altered variant of an ENAC protein. The protein can be used to identify agents that effect ion transport. The agonists can be used to identify agents conditions resulting from abnormal ion transport, such as water retention, increased blood pressure, chronic respiratory and metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Determination of presence of mutation conferring pathological condition mediated by altered ion transport - comprises analysing sample for presence of mutation of potassium ion channel gene, ENaC, or in its
                          Gaps
                                                                                                                                                                                                                              Epithelial sodium channel, ENaC, mutation, pathological condition, ion transport; water retention; blood pressure, metabolic acidosis; chronic respiratory disease; inflammation; human; PCR primer; ss.
                          ;
0
 Length 21;
                        1; Indels
                                                                                                                                                                                                         Exon 5 of an ENaC subunit amplifying forward primer B-6.
0.8%; Score 14.4; DB 1;
93.8%; Pred. No. 8.4e+02;
iive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; Page 38; 56pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Rossier BC;
                                                883 TGTGGGAACATCATCA 898
                                                                                                                                                                                                                                                                                                                                                                98WO-US004681.
                                                                                                                                                                                                                                                                                                                                                                                      97US-0040171P.
                                                                      TGTGGGAACTTCATCA 2
                                                                                                                                 AAV57643 standard; DNA; 21
                                                                                                                                                                                27-NOV-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             acidosis and inflammation
Query Match 0.83
Best Local Similarity 93.83
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                     Chang SS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1998-506740/43.
                                                                                                                                                                                                                                                                                                                                                                                                              (UYYA ) UNIV YALE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      encoded protein
                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                  WO9840516-A1.
                                                                                                                                                                                                                                                                                                                                                                11-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                     11-MAR-1997;
                                                                                                                                                                                                                                                                                                                                        17-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                    Lifton RP,
                                                                                                                                                                                                                                                                                Synthetic
                                                                      17
                                                                                                                                                          AAV57643;
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                                                                                                                                                                                                                                  Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
polymorphism; vascular disease; coronary artery disease; forensics;
myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mccarthy JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /standard name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Daley GQ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 6 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                             Human gene single nucleotide polymorphism #1665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lander ES, Gargill M, Ireland JS, Bolk S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                pulmonary embolism; paternity test; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (WHED ) WHITEHEAD INST BIOMEDICAL RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example; Page 160; 242pp; English.
BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       replace (11,G)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-JUL-2000; 2000US-0220947P.
16-AUG-2000; 2000US-0225724P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-SEP-2000; 2000WO-US024503.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99US-0153357P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MILL-) MILLENNIUM PHARM INC.
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AAF96904 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6 CCTGGACAAGTACCTG
                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                849 CCTGGACAAGGACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200118250-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LO-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                 06-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-MAR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Variation
                                                           AAF96904;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
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(first entry) Frosty forward primer. 24-OCT-2002 AAI73045; 

Gene; frosty; 7 transmembrane family; GPCR64; fetal liver; placenta; testes; uterus; vaccine; allergy; infection; Parkinson's disease; human immunodeficitency virus; HIV-1; HIV-2; pain; cancer; diabetes; obesity; anorexia; bulimia; asthma; migraine; vomiting; anxiety; PCR; acute heart failure; hypotension; hypertension; urinary retention; osteoporosis; angina pectoris; myocardial infarction; stroke; ulcer; benign prostatic hypertrophy; Giles dela Tourette's syndrome; primer; schizophrenia; manic depression; delirium; dementia; mental retardation; dyskinesia; Huntington's disease; ss.

Homo sapiens.

US2002064830-A1.

30-MAY-2002

22-JUN-2001; 2001US-00887377.

28-JUN-2000; 2000US-0214355P.

ALI S. HILL J. VAWTER L. (ALIS/)

(VAWT/)

Vawter L; Hill J, Ali S,

WPI; 2002-573695/61.

New frosty polypeptide, a member of 7 transmembrane family of polypeptides and encoding polynucleotide, useful for diagnosing and treating infections, cancer, diabetes, osteoporosis, psychotic and neurological disorders.

Example 8; Page 12; 17pp; English.

The sequences given in AA173045-47 are primers and a probe which were used in TagMan analysis of frosty mRNA. Frosty is a member of the 7 cransmenbrane family of polypeptides and shows homology with GPCR64.

Frosty is expressed in fetal liver, placenta, testes and uterus. Frosty and the corresponding cDNA are useful as vaccines. Frosty and frosty cDNA are also useful in the diagnosis and treatment of human diseases including allergies, infections such a bacterial, fungal, protozoan, and viral infections, particularly infections caused by human immunodeficiency virus (HIV)-1 or HIV-2, pain, cancers, diabetes, obesity, anorexia, bulimia, asthma, Parkinson's disease, acute heart fallure, hypotension, hypertension, urinary retention, osteoporosis, angina pectoris, myocardial infarction, stroke, ulcers, benign prostatic fallure, hypotension, omitting, psychotic and neurological disorders including anxiety, schizophrenia, manic depression, delirium, dementia, severe mental retardation and dyskinseisas, such as Huntington's disease compounds that may be agonists or antagonists which are also useful in therapy. Frosty is useful as an immunogenic are useful to isolate compounds that may be agonists or antabodies are useful to isolate compounds that may be agonists or antabodies are useful to isolate corrections of solatify the clones expressing the polypeptides or to purify the clones expressing the polypeptides or to purify the colones expressing the polypeptides may also be employed to treat diseases. Frosty is also useful for identify membrane bound or soluble receptor. Frosty construction and successing transgenic and receptor aritimals and successing the polypeptides or to public and a soluble receptor. Frosty is also useful for creating transgenic and excessing the successing th and knock-out animals, and for chromosome localization studies

The invention relates to a nucleic acid comprising single nucleotide polymorphisms (SNPs) associated with diseases. The nucleic acids comprising the SNPs and probes and primers for detecting them may be used in assays for the diagnosis of diseases associated with SNPs (such as sickle cell anaemia, agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, matchlar dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, syndrome, matchagis, Von Willebrand's disease, tuberous sclerosis, hereditary pherocytosis, Von Willebrand's disease, tuberous sclerosis, hereditary haemorrhagic telangiscreasia, familial colonic polyposis, Bhlers-Damios syndrome, osteogenesis imperfecta, and acute intermittent porphyria, syndrome, osteogenesis imperfecta, and acute intermittent porphyria, symptoms of, or susceptibility to, multifactorial diseases of which a component is or may be genetic, such as autoimmune diseases.

Illammation, cancer, diseases of the nervous system, and infection by pathogenic microorganisms, autoimmune diseases including rheumatoid arthritis, multiple sclerosis, diabetes (insulin-dependent and non-contractive disease).

Claim 1; Page 77; 96pp; English.

independent), systemic lupus erythematosus and Graves disease, cancers including cancers of the bladder, brain, breast, colon, oesophagus, kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate, skin, stomach and uterus, longevity, appearance (e.g., baldness, obesity), strength, speed, endurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments), in forensics and in paternity testing. ABK65381-ABK65841 represent human single nucleotide polymorphisms of the invention

Sequence 21 BP; 8 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

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                                      Gaps
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0.8%; Score 14.4; DB 1; Length 21; 93.8%; Pred. No. 8.4e+02; cive 0; Mismatches 1; Indels
 Query Match 0.8
Best Local Similarity 93.8
Matches 15; Conservative
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agammaglobulinaemia, diabetes insipidus; Lesch-Nyhan syndrome; muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease; familial hypercholesterolaemia; polycystic kidney disease; cancer; hereditary spherocytosis; Von Willebrand's disease; tuberous sclerosis; hereditary haemorrhagic telangiectasia; familial colonic polyposis; Ellers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; inflammation; nervous system disorder; infection; rheumatoid arthritis; multiple sclerosis; diabetes; systemic lupus erythematosus; Graves disease; longevity; obesity; baldness; fertility; forensic; paternity testing; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acid comprising single nucleotide polymorphisms, useful in forensics, paternity testing and diagnosis of disease.
                                                                                                                                                                              Human; single nucleotide polymorphism; SNP; sickle cell anaemia;
                                                                                                                                                       Human single nucleotide polymorphism #326.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lander ES;
                                                                                  Bb.
                      20
                                                                                                                                                                                                                                                                                                                                                                                                  18-JAN-2001; 2001US-00765081
                                                                                                                                                                                                                                                                                                                                                                                                                         19-JAN-2000; 2000US-0176861P
                                                                                 ABK65706 standard; DNA; 21
956 ACCGGCAGAAGGTGCT
                       ACCGGAAGAAGGTGCT
                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cargill M, Ireland JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ω.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-315108/35
                                                                                                                                                                                                                                                                                                                                                                                                                                               (CARG/) CARGILL M.
(IREL/) IRELAND J S
(LAND/) LANDER E S.
                                                                                                                                                                                                                                                                                                                                                    US2002037508-A1.
                                                                                                                                02-JUL-2002
                                                                                                                                                                                                                                                                                                                             Homo sapiens
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                                                                                                         ABK65706;
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                                                          RESULT 832
                                                                        ABK65706
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xylanase (xynA) transcriptional regulatory sequence operably linked to a heterologous coding sequence. Provided is a method for producing a heterologous protein in Aureobasidium pullulans, by up-regulating the expression of a sequence encoding a heterologous protein by adding xylan or xylose to a medium in which a recombinant A. pullulans cell comprising the new isolated nucleic acid molecule is cultured, where the medium contains glucose at a concentration less than 0.02 % (weight/volume) and a xynA transcription regulatory sequence is operably linked to the acquence encoding the heterologous protein, and the heterologous protein is expressed. The nucleic acid containing a signal peptide-encoding sequence, is useful for efficient and economical secreted expression of protein of interest in a eukaryotic cell, especially a fungal cell such as Aureobasidium pullulans. It may be used as a probe. The proteins produced are widely used in pharmaceutical, food, chemical and other industries. The present sequence represents a PCR primer for amplifying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated nucleic acid encoding a signal peptide for efficient and economical secreted expression of a protein of interest in a eukaryotic cell, widely used in pharmaceutical, food and chemical industries.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to an isolated nucleic acid molecule comprising a
                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                         Xylanase; xynA; transcriptional regulation; xylan; xylose; enzyme;
fungal; pharmaceutical; food; chemical; PCR primer; ss.
                                                                                          0;
                                                      Length 21;
                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                    A. pullulans xynA locus DNA amplifying primer APXR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the nucleotide sequence of A. pullulans xynA locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 4 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
              Sequence 21 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 1 Other;
                                                    Score 14.4; DB 1;
Pred. No. 8.4e+02;
                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYGE-) UNIV GEORGIA RES FOUND INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page 28; 43pp; English.
                                                                                        1;
                                                                                                                                 886 GGGAACATCATCAACATG 903
                                                                                                                                                                   2 GGGAACAGCMTCCACATG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JUN-2000; 2000US-00595344.
                                                    0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-JUN-2001; 2001WO-US019340.
                                                                                                                                                                                                                                                                    ABA94579 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                              09-APR-2002 (first entry)
                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aureobasidium pullulans.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Li X, Ljungdahl LG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-130735/17.
                                                                    Local Similarity
es 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200196578-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-DEC-2001
                                                                                                                                                                                                                                                                                                          ABA94579;
                                                      Query Match
                                                                                                                                                                                                                               RESULT 833
                                                                                        Matches
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Human multidrug resistance gene polymorphic sequence #31.
                                                                                           single nucleotide polymorphism.
               ABS98129 standard; DNA; 21 BP
                                                                                                                    28-NOV-2001; 2001WO-US044838.
                                                                                                                          28-NOV-2000; 2000US-00724389.
2 CACTCAGCTCGGCACC 17
                            (first entry)
                                                                                                                                 (DNAS-) DNA SCI LAB INC.
                                                                                                        WO200257410-A2
                                                                                                  Homo sapiens.
                            23-DEC-2002
                                                                                                              25-JUL-2002.
                     ABS98129;
         RESULT 83
셤
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Isolated nucleic acid molecules having polymorphisms in known human genes eg. cytochrome p450 and cathepsin S useful as genetic linkage markers for locating, identifying and characterizing the genes responsible for disorder-related traits.

WPI; 2002-698522/75. Guida M, Hall J;

Example 22; Page 144; 714pp; English.

This invention relates to the sequence of an isolated nucleic acid
molecule comprising at least one base variation from that of a known
than eytcohrome P450 Al (CYP4501A1), CYCochrome P450 A2 (CYP4501A2),
CYCochrome P450 02B1 (CYP45002B1), adrenergic receptor betal (ADBR1),
aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator.
CK (TARNY), cathepsin S (CTSS), cyclooxgenase 2 (COX2), diazepam binding
inhibitor (BBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
protein (FLAPP), glutathione-S-transferase 12 (GST12), histenmine-N-methyl
cransferase (HNMT), (AAllikrein 2) KLK2, nicotinamide -N-methyl
ctransferase (HNMT), NADPH quinone oxidoreductase 2 (NQ2),
sulfotransferase (HNMT), uroxinase receptor (UG72B4), UDP-glucuronosyl
ctransferase (HOG72B1S), uroxinase receptor (UG72B4), multidrug resistance 1
(WDR1), lactotransferin (LFI), milidrug resistance associated protein 3
(WDR3), orphan nuclear receptor (NR112), or acetylcholine muscarinic
ceceptor 1, 2, 3, 4, or 5 (CHNR1, CHNR2, CHNR3, CHNR4 or CHNR5) sequence.
The polymorphisms in the human genes cited in the invention are useful as
centered inkage markers for locating and characterising the genes that
are responsible for specific traits within the genome and eventually

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Gaps

.; 0

/ Match 0.8%; Score 14.4; DB 1; Length 21; Local Similarity 93.8%; Pred. No. 8.4e+02; les 15; Conservative 0; Mismatches 1; Indels

Query Match Best Local Si Matches 15;

0;

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identifying the genes responsible for a variety of disorder-related traits as a result of their e.g., overexpression, constitutive expression, mutation or underexpression, which may be used in diagnosing and/or treating the disorders. The nucleic acid molecules comprising the polymorphic sequences contained in CYP4501A1, CYPP4501A2, CYP4502E1, ARNT, BPHX2, GST12, NNRT, NOC2, NR112, STM, UGT2B4, UGT2B7, UGT2B15, ARR, MDR1 and/or MDR3 are useful for screening individuals for altered drug metabolism. The polymorphic sequences contained in CYP4501A1, CYP94501A2, AHR, MDR1 and/or MDR3 may also be used to screen individuals for altered used to screen for altered cardiovascular function, in COX2 for altered susceptibility to colorectal tumours, in DB1 or CHMR1 for altered central inpervous system function, in FLAP and HNMT for altered pulmonary, in FLAP and HNMT for altered pulmonary.
                                                                                                                                                                                                                                                                                 immunological or haematological function, in KLK2 for altered serine protease activity in the prostate, in LTF for altered immunological or haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence is that of a 5' primer, which was used with the 3' primer given in ACC58763 for the PCR amplification of the pro-alphal(III) chain. The PCR product was used to prepare a DNA molecule (see ACC58766) encoding a modified pro-alpha chain (see ABR42661) in which decorin replaced the globular domain of the N-propeptide of the pro-alphal(III) chain. This is an example of modified pro-alpha chains of the invention that may form part of a procollagen molecule for incorporation into
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel modified pro-alpha-chain useful for treating wounds and fibrotic disorders, has triple helical forming domain linked to N-terminal domain that contains a polypeptide sequence from proteoglycan protein core.
                                                                                                                                                                                                                                                                                                                                                     peripheral nervous system function. The present sequence represents a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Collagen; procollagen; pro-alpha chain; vulnerary; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.4; DB 1; Length 21; 93.8%; Pred. No. 8.4e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 7 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                         polymorphic DNA sequence of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pro-alphal(III) chain 5' PCR primer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (UYMA-) UNIV VICTORIA MANCHESTER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    drug delivery; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-OCT-2002; 2002WO-GB004785.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-OCT-2001; 2001GB-00025369, 23-OCT-2001; 2001GB-00025372.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            52 GCAGTGTGACTGCTGA 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACC58762 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bulleid NJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-504991/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO2003035692-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unidentified.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACC58762;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 835
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The invention relates to a novel polynucleotide isolated and purified from a human gene having any one of 935 fully defined sequences as given in specification, or a sequence having a base substitution. The invention further relates to: an oligonucleotide containing single nucleotide polymorphisms; a PCR primer set chosen from the combination of two DNA fragments from any one of 1201 fully defined sequences as given in specification; a labelling probe containing the SNP containing oligo; and a microarray equipped with the SNP containing oligo. The isolated human gene of the invention is useful for detecting the single nucleotide polymorphisms in human gene. The isolated human gene is also useful for diagnosis of disease and determination of side effect to a medical agent. The isolated human gene is also effective in detecting single nucleotide polymorphism in a human gene. This polynucleotide sequence represents one of the PCR primers used in the single nucleotide polymorphism
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                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel polynucleotide useful for detecting single nucleotide polymorphisms
collagen polymers, matrices and gels used to treat wounds and fibrotic disorders, in tissue replacement, and in cosmetic treatments
                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                        human; single nucleotide polymorphism; microarray; side effect; ss; primer; PCR.
                                                                                                                                                                                                                                                                                                                                                                                           Single nucleotide polymorphism detection primer, SEQ ID No 2063.
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                                                                                       Length 21;
                                                                                                                        1; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 2 A; 6 C; 5 G; 8 T; 0 U; 0 Other;
                                                     5 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                      0.8%; Score 14.4; DB 1;
93.8%; Pred. No. 8.4e+02;
cive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 2; SEQ ID NO 2063; 704pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1165 GIGGCTGCATCTTCT 1180
                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                           764 TGCTCAAGGACCTCAA 779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-FEB-2002; 2002JP-00034717.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-FEB-2002; 2002JP-00034717.
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                                                                                                                                                                                                TGGTCAAGGACCTCAA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      93.8%;
                                                                                                                                                                                                                                                                                    ADF88480 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                       Query Match 0.8
Best Local Similarity 93.8
Matches 15; Conservative
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                                                     Sequence 21 BP; 7 A;
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-820454/77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JP2003235571-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    in human gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-AUG-2003.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic,
                                                                                                                                                                                                                                                                                                                         ADF88480;
                                                                                                                                                                                                                                                   RESULT 836
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                                                                                                                                                                                                                                                                     ADF88480
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10017621-3sl.rng

ADJ13973 standard; DNA; 21 BP

(first entry)

20-MAY-2004

ADJ13973;

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The present invention relates to a method of determining a genotype associated with increased recreased resistance to familial bipolar affective disorder. The method comprises determining the genotype with at least one marker of at least one chromosomal region linked to a locus chromosomal regions are included of and localised between D45402 and D45424, D45431 and D45404, or D113394 and D11829. The invention also chromosomal regions are included of and localised between D45402 and D45424, D45431 and D45404, or D113394 and D11829. The invention also discloses a kit for determining a genotype associated with increased or decreased resistance to familial bipolar affective disorder, where the kit comprises markers for two or more of the chromosomal regions cited. The method and kit are useful for determining a genotype associated with increased or decreased resistance to familial bipolar affective disorder in a family affected by bipolar affective disorder contribution of these chromosomal regions to bipolar affective disorder in an affective family member, and for assessing an increased or decreased risk of developing bipolar illness for a tested individual from an affective family. ACA58053.ACA58292 represent primers used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Determining a genotype associated with increased or decreased resistance to familial bipolar affective disorder in a family comprises determining the genotype of e.g., chromosomal regions D4S402 and D4S424.
                                                                                                                                                                                              Human; genotype determination; familial bipolar affective disorder; chromosomal region linked; locus associated with resistance; D4S402; D4S424; D4S431; D4S404; D11S394; D11S29; chromosome marker; primer; ss.
                                                                                                                                                          Human familial bipolar affective disorder chromsome marker primer #24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 5 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 9; 79pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Paul SM;
                                                                                                                                                                                                                                                                                                                                                                                                                                        96US-0014334P.
97US-0062924P.
98US-00175158.
                                     ACA58076 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                   13-JUN-2001; 2001US-00881012.
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Best Local Similarity 93.8<sup>5</sup>
**+rhes 15; Conservative
                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Egeland JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GINN/) GINNS E I.
(EGEL/) EGELAND J A.
(PAUL/) PAUL S M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-352708/33.
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                                                                                                                                                                                                                                                                                                                       US2002192655-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                        29-MAR-1996;
20-OCT-1997;
19-OCT-1998;
                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                               19-DEC-2002
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                                                                             ACA58076;
RESULT 837
                    ACA58076,
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This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pl6 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                          probe; ss; chemical modification; methylation; array; CpG island; tumour suppressor; p16; human; H69; H1618.
                                                                                                        Human DNA probe used to immobilise CpG methylated DNA SeqID 1100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  probe; ss; chemical modification; methylation; array; CpG island;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human DNA probe used to immobilise CpG methylated DNA SeqID 1062
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Luebke KJ, Balog RP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; SEQ ID NO 1100; 210pp; English
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                                                                                                                                                                                                                                                                                                                                                 27-JUN-2001; 2001US-0301370P.
                                                                                                                                                                                                                                                                                                               27-JUN-2002; 2002US-00184085.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sarner HR, Minna JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-874843/81
                                                                                                                                                                                                                                                                                                                                                                                                         (MINN/) MINNA J D.
(LUEB/) LUEBKE K J.
(BALO/) BALOG R P.
                                                                                                                                                                                                                                                                                                                                                                                        (GARN/) GARNER H R.
                                                                                                                                                                                                                                         JS2003152950-A1
                                                                                                                                                                                                      Homo sapiens.
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0

Gaps

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0.8%; Score 14.4; DB 1; Length 21; 33.8%; Pred. No. 8.4e+02; ve 0; Mismatches 1; Indels

93.88;

315 CTCTGCACCAGAGATT 330

18 CTATGCACCAGAGATT

RESULT 838

ADJ13973

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Garner HR, Minna JD, Luebke KJ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention.
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(LUEB/)
(BALO/)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pl6 from two human lung tumour cell lines Héb and Hisl8. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This invention relates to a novel method for analysing chemically
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ss; chemical modification; methylation; array; CpG island; suppressor; p16; human; H69; H1618.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human DNA probe used to immobilise CpG methylated DNA SeqID 1099.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                        Balog RP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; SEQ ID NO 1062; 210pp; English
tumour suppressor; p16; human; H69; H1618
                                                                                                                                                                                                                                                                                                                                                        Luebke KJ,
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Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                        Minna JD,
                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-874843/81.
                                                                                                                                                                                                                                                                      (MINN/) MINNA J D.
(LUEB/) LUEBKE K J.
(BALO/) BALOG R P.
                                                                                                                                                                                                                                                    GARNER H R.
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                                           Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                      Garner HR,
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modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pl6 from two human lung tumour cell lines He9 and H1618. This oligonucleocide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                        Analysis of chemical modification of DNA involves obtaining sample of
to be analyzed, treating DNA with chemical reagents that result in
different base sequences, and determining sequence of resulting DNA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This invention relates to a novel method for analysing chemically
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Pred. No. 8.4e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                      Balog RP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; SEQ ID NO 1099; 210pp; English.
                                                                                                                                                                                                                                                      Luebke KJ,
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27-JUN-2001; 2001US-0301370P
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les 15; Conservative
                                                                                                                                                                                                                                                      Garner HR, Minna JD,
                                                               (GARN/) GARNER H R.
(MINN/) MINNA J D.
(LUEB/) LUEBKE K J.
(BALO/) BALOG R P.
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MINNA J D.
LUEBKE K J.
BALOG R P.
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Gaps

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Garner HR, Minna JD,
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   WPI; 2003-874843/81
                                                                                                                                                                                  (GARN/) GARNER H R.
                                                                                Query Match
Best Local Similarity
                                                                                                                                                          US2003152950-A1
            be analyzed,
                                                                                                                                                    Homo sapiens
                                                                                                                                                                14-AUG-2003
                                                                    invention
         Analysis
                                                                                                  N
                                                                                                                        ADJ13976;
                                                                                                                                                                                            (BALO/)
                                                                                                                                                                                      (MINN/)
                                                                                                                                                                                         (LUEB/)
                                                                                                                                          probe;
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                                                                                                            RESULT 842
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different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprishing an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene p16 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Analysis of chemical modification of DNA involves obtaining sample of DNA
This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human DNA probe used to immobilise CpG methylated DNA SeqID 1065.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                probe; ss; chemical modification; methylation; array; CpG island;
tumour suppressor; p16; human; H69; H1618.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 0.8%; Score 14.4; DB 1; Length 21; Best Local Similarity 93.8%; Pred. No. 8.4e+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 2 A; 13 C; 3 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-874843/81.
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LUEBKE K J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BALO/) BALOG R P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2003152950-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4-AUG-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADJ13938;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (LUEB/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MININ)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADJ13938
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                    This invention relates to a novel method for analysing chemically modified macromolecules. Specifically, it refers to a high throughput method for the parallel analysis of many potential sites of chemical modification (e.g. methylation) in DNA. The present invention describes treating the DNA with one or more chemical reagents that result in different base sequences depending upon the presence or absence of the modification of interest. Accordingly, a device comprising an array of probes is provided to hybridise with and select the altered DNA sequences that comprise the modifications of interest such as a CpG island. In particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor gene pl6 from two human lung tumour cell lines 469 and 41618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Analysis of chemical modification of DNA involves obtaining sample of DNA to be analyzed, treating DNA with chemical reagents that result in different base sequences, and determining sequence of resulting DNA.
                                                                                 of chemical modification of DNA involves obtaining sample of DNA alyzed, treating DNA with chemical reagents that result in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                       different base sequences, and determining sequence of resulting DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ss; chemical modification; methylation; array; CpG island; suppressor; pl6; human; H69; H1618.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human DNA probe used to immobilise CpG methylated DNA SeqID 1103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.4; DB 1; Length 21; 93.8%; Pred. No. 8.4e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Balog RP;
                                                                                                                                                                                       Example 1; SEQ ID NO 1102; 210pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; SEQ ID NO 1103; 210pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          555 CCTCAGCCGCCGCCTC 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADJ13976 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTCAGCCGCCGCCCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-JUN-2002; 2002US-00184085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-JUN-2001; 2001US-0301370P
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LUEBKE K J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BALOG R P.
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The present invention relates to a polynucleotide isolated from a human gene and is useful for detecting a single nucleotide polymorphism in a human gene or for diagnosing of disease. The invention enables the detection of a single nucleotide polymorphism in a human gene. The present sequence represents a primer of the invention.
                                                                                                                                                                                                                                                 Novel polynucleotide useful for PCR amplification along with two DNA fragment from another set of sequences, or for detecting single nucleotide polymorphism in human gene.
                                      human; single nucleotide polymorphism; SNP; ss; primer.
                                                                                                                                                                                                                                                                                                     Claim 2; SEQ ID NO 6056; 2627pp; Japanese
                                                                                                                                                                                               (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN
             Primer of the invention #2747.
                                                                                                                                                                       08-MAR-2002; 2002JP-00064373.
                                                                                                                                           08-MAR-2002; 2002JP-00064373.
                                                                                                                                                                                                                        WPI; 2004-093977/10.
                                                                                          JP2003259875-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAY-1995;
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                                                                                                                    16-SEP-2003.
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                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT97858;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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                                                                                                                                  o;
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particular, this invention refers to analysing the methylation pattern of a region of the promoter for the tumour suppressor game pl6 from two human lung tumour cell lines H69 and H1618. This oligonucleotide sequence is a human DNA probe used to immobilise CpG methylated DNA of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ina
                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to a polynucleotide isolated from a happene and is useful for detecting a single nucleotide polymorphism is the invention or dispensing of disease. The invention enables the detection of a single nucleotide polymorphism in a human gene. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel polynucleotide useful for PCR amplification along with two fragment from another set of sequences, or for detecting single nucleotide polymorphism in human gene.
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33.8%; Pred. No. 8.4e+02;
ve 0; Mismatches 1; Indels
                                                                                                    Query Match 0.8%; Score 14.4; DB 1; Length 21; Best Local Similarity 93.8%; Pred. No. 8.4e+02; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                         human; single nucleotide polymorphism; SNP; ss; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence represents a primer of the invention
                                                                              Sequence 21 BP; 3 A; 12 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 21 BP; 5 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 2; SEQ ID NO 4233; 2627pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN,
                                                                                                                                                          570
                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           885 TGGGAACATCAAC 900
                                                                                                                                                                                                                                                                                                                                of the invention #924
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                                                                                                                                                                                   cerchecececee 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-MAR-2002; 2002JP-00064373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-MAR-2002; 2002JP-00064373
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                                                                                                                                                                                                                                                   ADK95204 standard; DNA; 21
                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                          555 CCTCAGCCGCCGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2004-093977/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADK97027 standard;
                                                                                                                                                                                                                                                                                                                                                                                                             JP2003259875-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-MAY-2004
                                                                                                                                                                                                                                                                                                     06-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                     16-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                            ADK95204;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADK97027
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ADK97027/c
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                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primer 7 for DNA encoding chimeric Ewing's sarcoma-WT1 protein.
                                                                                                0
                                         0.8%; Score 14.4; DB 1; Length 21; 33.8%; Pred. No. 8.4e+02; Ive 0; Mismatches 1; Indels
Sequence 21 BP; 3 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SLOK ) SLOAN KETTERING INST CANCER RES.
                                                                                                                                                 1303 GAGTTCAAGACATACA 1318
                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95US-00437027
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                                                                      93.8%;
                                                                                                                                                                                                                                                                                                                          AAT97858 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                GAGGTCAAGACATACA
                                                                      Local Similarity 93.8
nes 15, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1997-479448/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gerald
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Diagnosis of desmoplastic small round cell tumours - by detecting nucleic
                                                                                                  transcriptase PCR), and probes for the detection of DNA encoding a chimeric Ewing's sarcoma (EWS)-WT1 protein. EWS is also known as peripheral neuroectodermal tumour (PMET). WT1 was screened as a breakpoint locus because of its involvement in Wilms' tumour, which shares some histopathologic features of desmoplastic small round cell (DSRC) tumours. The EWS-WT1 chimeric transcript has been detected in 11 out of 12 DSRC tumours studied and in none of 49 other tumours. DSRC tumours are associated with translocation of the EWS gene. The present oligonucleotide is complementary to the WT1 intron 5' to exon 7, and is used in a method for the diagnosis of DSRC tumours in patients. The method comprises detecting a nucleic acid molecule encoding a chimeric EWS-WT1 protein in a sample from the subject, where positive detection indicates the presence of a DSRC tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Polymorphism; biallelic; human; forensic; paternity testing; disease; detection; phenotypic typing; characteristic; infection; hereditary; autoimmune disease; cancer; inflammation; drug; therapy; medicament; treatment; marker; primer; ss.
                                                                                        Oligonucleotides AAT97852-68 are used both as PCR primers (in reverse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New isolated nucleic acid segments from the human genome - used for determining polymorphic forms for use in e.g. forensics, paternity testing or phenotypic typing for disease.
                                                                                                                                                                                                                                                                                                                                                                                           0.8%; Score 14.4; DB 1; Length 22; 3.8%; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human biallelic polymorphic marker upstream primer #10.
                                                                                                                                                                                                                                                                                                                                                        Sequence 22 BP; 1 A; 10 C; 2 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                    acid encoding chimeric EWS-WT1 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (WHED ) WHITEHEAD INST BIOMEDICAL RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 15; Page 47; 310pp; English.
                                                     Disclosure; Col 29; 34pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1697 CTTACTCTCTGCCTAC 1712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hudson T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX09130 standard; DNA; 22 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7 crtacrcrcrccrcc 22
                                                                                                                                                                                                                                                                                                                                                                                                             93.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                              15; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1998-286974/25.
                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-NOV-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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isolation of various biallelic polymorphic markers found in the human genome (represented in AAX10269-X12937). These primers can be used in a method for determining polymorphic forms in an individual for use in e.g.

AAX09121-X10268 are allele-specific oligonucleotide primers used in the

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Gaps

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forensics, paternity testing or for phenotypic typing for diseases such as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, Wiskott-Andrido syndrome, Fabry's disease, familial hypercholesterolemia, polycystic kidney disease, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos syndrome, osteogenesis imperfecta, acute intermittent porphyria, autoimmune diseases, inflammation, cancer, diseases of the nervous system, infection by pathogenic microorganisms, and characteristics such as longevity, appearance (e.g. baldness, obesity), strength, speed, endurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments. The isolated polymorphic nucleic acid segments can also be used to produce medicaments for the treatment or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Reverse and forward (AAV32817) primers were used to amplify the Staphylococcus aureus pcp34 gene. The PCR product was used as a probe in the method of the invention. The invention provides a method of differentiating clinical isolates of S. aureus in isolated genomic DNA samples. The method involves digesting the samples with a restriction enzyme followed by southern blot hybridisation, using DNA probes selected from at least two S. aureus genes, to produce a hybridisation profile which is capable of differentiating S. aureus clinical isolates. The S. aureus genes used as genotypic markers were the collagen adhesin (cna)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                collagen adhesin gene; cna; primer; PCR; amplification; cnaB; cna-up gene; fibronectin binding protein A gene; fnbA; fnbB; beta-toxin; pcp gene; pcp12 gene; pcp34 gene; hlb; biotyping; southern blot hybridisation; insertion sequence typing;

    uses Southern

                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Differentiating clinical Staphylococcus aureus strains - uses South
blot probes for specific genes that determine genomic organisation.
                                                                                                                                                                                                                                                                                                                                                                                        ..
0
                                                                                                                                                                                                                                                                                                                                              Length 22;
                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Reverse primer for Staphylococcus aureus pcp34 gene.
                                                                                                                                                                                                                                                                                                           Sequence 22 BP; 9 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                0.8%; Score 14.4; DB 1;
33.8%; Pred. No. 8.7e+02;
ve 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 8; Fig 7; 25pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                1457 TCTTCCTCAGTCTGGG 1472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96US-00667079.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  plasmid profile analysis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96US-00667079
                                                                                                                                                                                                                                                                     prophylaxis of such diseases
                                                                                                                                                                                                                                                                                                                                                                 93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16 rerrecreasitate 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV32818 standard; DNA; 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                              Query Match 0.8
Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aureus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-446070/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             blot probes for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US5789171-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Smeltzer MS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-AUG-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV32818;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV32818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85888888888888888888888
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ACC82981;
                                                                                                                                                              vaccine;
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                                                                                                                                                                                                                                                                                                                    (SAME-)
(UYCA-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2003 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 8
ADB80421
                ACC8298.
                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Characterizing increased dedifferentiation of cancer cells useful for diagnosing cancer, particularly early cervical cancer, comprises applying body fluids to a foil covered slide and detecting dye-marked cells by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention describes a novel method for characterizing increased dedifferentiation and micro-metastasis of cancer cells, comprising applying body fluid cells to a carrier and cytodiagnostically examining its cells using micro-dissection to separate cytodiagnostically distinguishable cells from normal cells and performing at least one analysis on the separated cells. The method is used to diagnose cancer,
gene, cnaB gene, cna-up gene, fibronectin binding protein A (fnbA) gene, fnbB gene, beta-toxin (hlb) gene, pcp gene, pcp12 gene and the pcp34 gene. This polymorphic based genetic identification method has proved more specific in identifying epidemiologically related strains than, previous techniques, including polymerase chain reaction, biotyping, insertion sequence typing and plasmid profile analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  particularly for the early recognition of cervical carcinoma. This sequence represents a PCR primer used in the amplification of the human Papilloma virus E6 gene used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                      E6; dedifferentiation; micro-metastasis; cancer cell;
                                                                                                                                                ;
0
                                                                                                                  0.8%; Score 14.4; DB 1; Length 22; 33.8%; Pred. No. 8.7e+02; Ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.4; DB 1; Length 22;
93.8%; Pred. No. 8.7e+02;
lve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 22 BP; 5 A; 11 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                           Sequence 22 BP; 8 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                             Human papilloma virus E6 PCR primer 33ME51.
                                                                                                                                                                                                                                                                                                                                                                                  cytodiagnostic; cervical carcinoma; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; Page 14; 18pp; German.
                                                                                                                                                                        1306 TTCAAGACATACAACT 1321
                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-FEB-2000; 2000DE-01009081.
                                                                                                                                                                                            TCCAAGACATACAACT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-FEB-2001; 2001DE-01009259
                                                                                                                               ilarity 93.8%;
Conservative
                                                                                                                                                                                                                                                                22
                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                               AAH49379 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                             Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-607957/70
                                                                                                                                Local Similarity
es 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GIES/) GIESING M.
                                                                                                                                                                                                                                                                                                                                                                                                                                      DE10109259-A1.
                                                                                                                                                                                                                                                                                                                   30-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-SEP-2001
                                                                                                                                                                                                                                                                                         AAH49379;
                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                        RESULT 849
                                                                                                                                           Matches
                                                                                                                                                                                                                                                    AAH49379
 8888888888
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The invention relates to molecules comprising HIV-1 subtype isolate regulatory/accessory genes (tat, nef and rev genes) and modifications and derivatives thereof. The invention also provides proteins encoded by such genes. Sequences of the invention are useful for manufacturing vaccines for treating or preventing human immunodeficiency virus (HIV) infections. They are also useful in gene therapy. The present sequence is a PCR primer used to sequence HIV-1 tat gene. Note: This sequence is a PCR be the same as that shown as SEQ ID NO. 23 in sequence listing. However this sequence has an additional base at its 3' end. (Updated on 27-OCT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        comprising HIV-1 subtype isolate regulatory/accessory for manufacturing a vaccine for treating or preventing HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ss; primer; antiinflammatory; antiasthmatic; antiallergic; CLCA1; calcium activated chloride channel protein; chest disorder; airway disorder; chronic obstructive lung disease; chronic bronchile; bronchial asthma; rhinitis; hay fever; pneumonia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                 y gene; accessory gene; HIV; human immunodeficiency virus; infection; gene therapy; tat; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 22;
                                                                                                                                                                                 Outer reverse PCR primer used to sequence HIV-1 tat gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bourn W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 22 BP; 5 A; 11 C; 0 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%; Score 14.4; DB 1; 3.8%; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gray CM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOUTH AFRICAN MEDICAL RES COUNCIL. UNIV CAPE TOWN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 20; 97pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Williamson C, Van Harmelen JH,
                                                                                                                                                                                                                                                                                                             Human immunodeficiency virus 1.
  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rat CLCAl gene PCR primer #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-OCT-2002; 2002WO-IB004550.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   field)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31-OCT-2001; 2001ZA-00008978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 CCTCAATATCCCCATC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            93.8%;
ACC82981 standard; DNA; 22
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                                                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15; Conservative
                                                                                                        (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-430497/40.
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                                                                                                                                                                                                                                                                                                                                                                  WO2003037919-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New molecules
genes, useful
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                                                                                                                                 27-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAY-2003,
                                                                                                      27-0CT-2003
                                                                                                                                                                                                                                 Regulatory
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Gaps

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786

771 GGACCTCAAACACGCC

Best Local Similarity 93.8%; Matches 15; Conservative

3 GGACCTCCAACACGCC 18

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The invention relates to proteins and their salts and partial peptides which are the expression product of the rat CLCAl gene or are related proteins with similar activity. CLCAl is a calcium activated chloride channel protein. The proteins are useful for the treatment, prevention and diagnosis of chest and airway disorders including chronic obstructive lung disease, chronic bronchitis, bronchial asthma, chronic thinitis, acute rhinitis, allergic rhinitis, why fever and pneumonia. This sequence corresponds to a PCR primer used to isolate and clone the rat CLCAl gene
                                                                                                                                                                                                                                                                         Rat CLCAl gene and protein encoded by it useful for screening inhibitors of its activity and expression and as chronic obstructive lung disease and bronchial asthma remedies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  genetic alteration; diagnosis; malignant disease; tumour; metastasis; single nucleotide polymorphism; SNP; cancer; PCR primer; detection; human; chromosome 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 22 BP; 6 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
                                                                                                                                                                                                                                                                                                                                    Example 2; Page 97; 115pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human chromosome 1 SNP PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    672 AAGCAAGCTCACAGAC 687
                                                                                                                            02-NOV-2001; 2001JP-00337864.
13-DEC-2001; 2001JP-00380099.
18-JAN-2002; 2002JP-00010035.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-JUN-2003; 2003WO-US019926.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-JUN-2002; 2002US-0391515P
                                                                                               01-NOV-2002; 2002WO-JP011417.
                                                                                                                                                                                     (TAKE ) TAKEDA CHEM IND LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADH28100 standard; DNA; 22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCGAGCTCACAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                  Nakanishi A, Morita S;
                                                                                                                                                                                                                                               WPI; 2003-430500/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
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                                        WO2003037927-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15,
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                                                                     38-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ADB80434)
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             Rattus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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ö alteration in a nucleic acid for the diagnosis and management of anteration in a nucleic acid for the diagnosis and management of malignant disease. The method comprises providing a target nucleic acid having a predetermined sequence in the normal population; and assessing the target nucleic acid for the extent of loss of heterozygosity relative to predetermined an increased loss of heterozygosity being correlated with enhanced tumour invasiveness and metastasis. Also described is a method for determining the presence or absence of at least one specific nucleotide in a target mucleic acid for the diagnosis and management of malignant disease. The methods are useful in detecting genetic alterations (e.g., single nucleotide polymorphisms (SNPS)) in a defined polymorphase sequence of an alignant disease sequence of diagnose and manage malignant diseases such as cancer. The Rat airway epithelial cell line NIM-1 expressing a calcium-activated chloride channel protein for screening chloride channel inhibitors as agents for treatment of respiratory disease including chronic obstructive lung disease and asthma. genetic alterations associated with cancer comprises providing rat; airway epithelial cell; calcium-activated chloride channel; CLCA; antiasthmatic; antiallergic; antiinflammatory; respiratory disorder; chronic obstructive lung disease; asthma; hayfever; cystic fibrosis; pulmonary fibrosis; pneumonia; primer; ss; RT-PCR. present sequence represents a PCR primer used to amplify genomic DNA corresponding to known SNPs located in predetermined regions of human chromosome 1, which is used in an example from the present invention. a target nucleic acid from a patient sample having a predetermined sequence in the normal population, and assessing the nucleic acid for Gaps The present invention describes a method for determining a genetic ö 0.8%; Score 14.4; DB 1; Length 22; 33.8%; Pred. No. 8.7e+02; ve 0; Mismatches 1; Indels Sequence 22 BP; 8 A; 5 C; 6 G; 3 T; 0 U; 0 Other; Rat CLCA1 RT- PCR primer 1 SEQ ID NO:10. Example 1; SEQ ID NO 219; 50pp; English. Nakanishi A, Iwashita H, Morita S; BP. 417 03-JUL-2003; 2003WO-JP008486. 05-JUL-2002; 2002JP-00196915. GAAGTCTCCAGTGAGA 20 93.8%; (TAKE ) TAKEDA CHEM IND LTD ADI29505 standard; DNA; 22 (first entry) 402 GCAGTCTCCAGTGAGA 15; Conservative oss of heterozygosity WPI; 2004-108820/11. WPI; 2004-071731/07. Local Similarity WO2004005495-A1. 22-APR-2004 15-JAN-2004. ADI29505; Query Match Matches ADI29505 ò 0

Gaps

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0.8%; Score 14.4; DB 1; Length 22; 33.8%; Pred. No. 8.7e+02; ve 0; Mismatches 1; Indels

93.8%;

Maris JM, Gelfand

Fortina P,

Length 22;

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WPI; 2004-450380/42.
Query Match
Best Local Similarity
Matches 15; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2004048568-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                     26-AUG-2004
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13-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mouse kank
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                                                                                                                                                                                                                                              RESULT 855
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Designing antisense compound, by inputting oligonucleotide with antisense effect to target gene, extracting RNA, analyzing gene expression,
                                                                          The invention relates to novel rat airway epithelial cell lines expressing a calcium-activated chloride channel protein (CLCA). A cell line of the invention has antiasthmatic, antiallergic, and antiinflammatory activity. The invention is useful for the treatment and prevention of respiratory disorders, including chronic obstructive lung disease, asthma (including chronic and acute asthma and allergic asthma), hayfever, cystic fibrosis, pulmonary fibrosis and pneumonia. The present sequence is used in the exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antisense compound, all-RNA fraction, expression, antisense effect; antiangiogenic, vasopermeability, antisense therapy; angiogenesis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           effect to target gene, extracting RNA, analyzing gene expression, modifying oligonucleotide to produce antisense effect.
                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.4; DB 1; Length 22; 93.8%; Pred. No. 8.7e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antisense compound design-related oligonucleotide SeqID17.
                                                                                                                                                                                                                                                                                                                     Sequence 22 BP; 6 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; SEQ ID NO 17; 67pp; Japanese.
                           Example 3; SEQ ID NO 10; 140pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               672 AAGCAAGCTCACAGAC 687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADP18593 standard; DNA; 22 BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-AUG-2002; 2002JP-00235849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGCGAGCTCACAGAC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                           15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SANY ) SANKYO CO LID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2004-395159/37.
                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JP2004129650-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADP18593;
                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mouse kank protein useful for detecting cancer, treating cancer, in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention comprises the amino acid and coding sequence of the mouse kank (mkank) protein. The DNA and protein sequences of the invention are useful in the detection and treatment of cancer. The present DNA sequence represents a PCR primer for the mouse kank gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis; intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                             0
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.8%; Score 14.4; DB 1; Length 22; 93.8%; Pred. No. 8.7e+02;
0.8%; Score 14.4; DB 1; Length 2
93.8%; Pred. No. 8.7e+02;
ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                     mouse; murine; kank; mkank; cancer; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 22 BP; 4 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                          (mkank) gene-specific PCR primer #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAT INST ADVANCED IND SCI & TECHNOLOGY. INFO GENES CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CMV antisense oligonucleotide (ISIS 5481).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; SEQ ID NO 11; 83pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    drug discovery for treating cancer.
                                                                                       1025 AGCTGGCTGACTTTGG 1040
                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   888 GAACATCATCAACATG 903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-NOV-2003; 2003WO-JP014930.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-NOV-2002; 2002JP-00339909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7
                                                                                                                                                                                                                                         22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT11978 standard; DNA; 19
                                                                                                                              AGCTGGCTGACGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTACATCATCAACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                (first entry)
                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15; Conservative
                                                                                                                                                                                                                                         ADO59314 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kiyama R, Kitajima K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 22 BP; 5 A; 10 C; 3 G; 4 T; 0 U; 0 Other;
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antiviral; diagnostic; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16; Conservative
                                                                            (ISIS-) ISIS PHARM INC
                                                                                                     Draper K,
                                                                                                                                WPI; 1995-292538/38
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-AUG-1993;
                         25-JAN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-DEC-1995
15-AUG-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                       Baker B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT01679;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 858
AAT01679/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                         AAT11971-84 are antisense oligonucleotides (ONS) against human cytomegalovirus (CMV) that displayed activities of at least 50 % of control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal mismatches could be tolerated without loss of antiviral activity.

Antisense ONS targeting CMV DNA or RNA coding for the IB1, IE2 or DNA polymerase proteins have been shown to be effective in therapy, prophylaxis and diagnosis of CMV infection. The ONS may be modified to reduce nuclease resistance and to increase their efficacy. Modifications moieties at the 2' position. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                               New oligo-nucleotide inhibits cytomegalovirus replication - by binding to a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and treatment of CMV diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        antisense; cytomegalovirus; CMV; human; therapy; prophylaxis; diagnosis; intermediate early complex; IE1; IE2; DNA polymerase gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%; Score 14.2; DB 1; Length 19;
84.2%; Pred. No. 8.4e+02;
ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag= a
/note= "phosphorothioate backbone"
                                                      /*tag= a
/note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CMV antisense oligonucleotide (ISIS 4376)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cocation/Qualifiers
                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                    Example 10; Col 17; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        130 CGGATGAAGAAGATCAAAC 148
                                                                                                                                                                                                                             X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGCAAGAAGAGAGCAAAC 1
                                                                                                                                                                                                                          Draper K, Anderson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT11971 standard; DNA; 19 BP
                                                                                                                                               93US-00009263
                                                                                                                                                                         92US-00927506
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                   /*tag=
                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (revised)
                                                                                                                                                                                                                                                      WPI; 1995-292538/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modified base
                             Key
modified base
                                                                                                                                               25-JAN-1993;
                                                                                                                                                                         19-NOV-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-MAR-1996
                                                                                           US5442049-A
                                                                                                                      15-AUG-1995
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  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT11971;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19
                                                                                                                                                                                                                             Baker B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytomegalovitus (CMV) that displayed activities of at least 50 % of control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal manarches could be tolerated without loss of antiviral activity. ISIS 4376 is a 19-mer antisense ON related to ISIS 2292, but with one nucleotide removed from each end. Antisense ONS targeting CMV DNA or RNA coding for the IEI, IE2 or DNA polymerase proteins have been shown to be effective in therapy, prophylaxis and diagnosis of CMV infection. The ONS may be modified to reduce nuclease resistance and to increase their efficacy. Modifications include phosphorothioate backbones, alkyl and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        halogen-substituted sugar moieties at the 2' position. (Updated on 25-MAR -2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT11971-84 are antisense oligonucleotides (ONs) against human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 14.2; DB 1; Length 19; Pred. No. 8.4e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 0 A; 6 C; 3 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Peptide nucleic acid targetting CMV IE2 nuc sig 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 10; Col 17; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   131 GGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                     Anderson K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 gcaagaagaagcaaacg 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT01679 standard; DNA; 19 BP.
93US-00009263.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94WO-US009039
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10017621-381.rng

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possess no significant charge and are water soluble, which facilitates cellular uptake. Futher, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by
                                                                                                                                                                                              New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma:virus - are stable anti:sense molecules with high affinity for single stranded DNA, used for treating infections.
                                                                                                                                                                                                                                                                                                                                                                                          New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5 untranslated region, intron(exon (I/B) junction or coding sequence of cytomegalovirus gene selected from NA polymerase, IE1 and IE2, or hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a papillomavirus. The PNAs can be used to target RNA and single stranded DNA (spond) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which first PNA strand binds with the resulting double helix or with the first PNA strand. The PNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Identifying simple tandem repeat loci in DNA - by screening DNA library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                proteases. The present sequence targets CMV IE2 nuclear localisation
                                                                           Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
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linkage studies; analysis; alleles;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
0; Mismatches 3; Indels
                                                                           Ecker DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 0 A; 6 C; 3 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Simple tandem repeat (STR) PCR primer wgla3a*.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                    Mirabelli CK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               131 GGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                   Claim 2; Page 43; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19 GCAAGAGAGAGCAAACG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ95226 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%;
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PCR primer wgla3a*; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Simple tandem repeat; STR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                    Crooke ST,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Armour J;
          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LEICESTER
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                                                                    Anderson KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W09517522-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-FEB-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Jeffreys AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-JUN-1995.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAQ95226;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           THE STATE OF THE S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                  The William and (BN) have a sequence hybridisable to AUG region, 5, untranslated region, intron/exon (I/E) junction or coding sequence of cycomegalovirus gene selected from DNA polymerase, IE1 and IE2, or pyridisable to the E, E2, E4, E5, E6, F7, L1 or L2 reading frames of a papillomavirus. The PNAs can be used to target RNA and single stranded to papillomavirus processes and also as diagnostics (e.g., as probes for they may be used therapeutically for modulating cytomegalovirus and papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNAs oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which a first PNA strand binds with RNA or ssDNA and a second PNA strand binds with the resulting double helix or with the first PNA strand binds with the distillates cellular uptake. Futher, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by proteasses. The present sequence targets CWV IE2 nuclear localisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "at least one (and preferably all) of the backbone
                                                                                                                                                                                           New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma:virus - are stable anti:sense molecules with high affinity for single stranded DNA, used for treating infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                subunits are composed of amide units, so that the oligomer consists of the nucleobases attached covalently to a polyamide backbone"
                                                                                                                                                                                                                                                                                                                                                                                                 oligomers are claimed which (A) have at least one peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus; antiviral; diagnostic; ss.
                                                                       Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
0
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                                                                    Mirabelli CK, Ecker DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide nucleic acid targetting CMV IE2 nuc sig 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                Claim 2; Page 44; 65pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT01649 standard; DNA; 19
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                                                                Crooke ST,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag=
(ISIS-) ISIS PHARM INC
                                                                                                                                 WPI; 1995-090841/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 16; Conserv
                                                                Anderson KP,
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misc_feature
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                                                                               AAQ95226 and AAQ95227 are a primer pair for the PCR amplification of the simple tandem repeat (STR) corresponding to wgla3. The STR can be used for treatment and diagnosis in human and veterinary medicine, partic. for generic characterisation, mapping, linkage studies and analysis/diagnosis of acquired disease alleles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Detection of human cytochrome p4501A2 gene polymorphism - useful in gene diagnosis of metabolic activity polymorphism.
                                                                                                                                                                                                                                                  Gaps
to enrich for fragments contg. the repeats before cloning and rescreening, also simple tandem repeats for treatment or diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cytochrome P450; detection; diagnosis; polymorphism; substitution; metabolism; respiration; polymerase chain reaction; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human cytochrome P4501A2 (CYPIA2) gene PCR amplification primer.
                                                                                                                                                                                                                                                  ·,
                                                                                                                                                                                                              0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19 BP; 4 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                Sequence 19 BP; 3 A; 9 C; 1 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Page 8; 23pp; Japanese.
                                                                                                                                                                                                                                                                                   1446 GAAACAICCAITCTICCIC 1464
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                                                Claim 25; Page 36; 51pp; English
                                                                                                                                                                                                                                                                                                        1 GATCCATCCATCCTTCCTC 19
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                                                                                                                                                                                                                                                                                                                                                                                                     AAT10879 standard; DNA; 19
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                                                                                                                                                                                                                 Query Match 0.8
Best Local Similarity 84.2
Matches 16, Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1996-087678/09.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fukui I,
                                                                                                                                                                                                                                                                                                                                                                                                                                    AAT10879
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                                                                                                                                                                                                                                                                                                                                                                    RESULT 861
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This invention relates to novel oligonucleotide PCR primers which may be used to identify markers associated with genetic diseases and traits in dogs, in particular to disquose genetic diseases that are not phenotypically visible and to identify carriers of recessive diseases. A specific application is diagnosis of copper toxicosis (CT). The invention can also be used to create a genetic map of the canine genome; to generate breed-specific profiles, to establish paternity and to identify dogs from DNA fingerprints. The method provides rapid analysis of the target sequences from only a small sample of DNA. Diagnosis can be done at any time in the dog's life. The present sequence is that of a PCR primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New oligonucleotide primers for diagnosis of genetic diseases and traits in dogs - amplify specific regions of the genome containing microsatellite repeats, especially for diagnosing copper toxicosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                              genetic disease; genetic trait; dog; carrier of recessive disease; copper toxicosis; CT; canine genome map; breed-specific profile; DNA fingerprint; dog identification; PCR; primer; ss.
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34.2%; Pred. No. 8.4e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 4 A; 3 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                  Canine disease marker-related PCR primer 247.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Yuzbasiyan-Gurkan V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                594 TGGCTTTGGGAAACTGGAG 612
270 ACGIGCIGCICCIGGGAA 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; Page 14; 40pp; English.
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                               1 Argrecreaccereses 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UNMI ) UNIV MICHIGAN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV41067 standard; DNA; 19
                                                                                                               ADG77403 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-SEP-1998 (first entry)
                                                                                                                                                                                 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Brewer GJ, Venta PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1997-435082/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                    Canis familiaris.
                                                                                                                                                                                                                                                                                                                                                                                                                     18-FEB-1997;
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                                                                                                                                                                                                                                                                                                                                                   WO9731011-A1
                                                                                                                                                                                 11-MAR-2004
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                                                                                                                                                  ADG77403;
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                                                                                 RESULT 862
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ID AAV41
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AC AAV42
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Gaps

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3; Indels

0; Mismatches

16; Conservative

Matches

Ouery Match 0.8%; Score 14.2; DB 1; Length 19; Best Local Similarity 84.2%; Pred. No. 8.4e+02;

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The lac2-specific primers (AAV26433 and 26434) were used to amplify and detect the lac2 gene which had been injected into C57B1/6 mice using a recombinant adeno-associated virus (AAV) vector. This confirmed the adeno-associated virus vector can be used to deliver a therapeutic molecule to the liver of a mammal. This can be used for the expression of therapeutic molecules such as secretory proteins, antisense molecules or ribozymes, in the liver, especially to treat hepatic diseases
                   lacZ; adeno-associated virus vector; therapeutic; liver; hepatic disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel adeno-associated viral vectors - for liver specific delivery of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense, oligonucleotide, immediate early, DNA polymerase, CMV, cytomegalovirus, inhibition, replication, sugar modification; phosphorothioate, infection; retinitis, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                           Chloemer RH, Wang X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 3 A; 1 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Page 19; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATGAGAGTGGTGGTG 241
                                                                                                                                                                                                                                                                                                                                                                                                             Srivastava A, Ponnazhagan S, (
Zhou S, Escobedo J, Dwarki V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATGAGCGTGGTGTTATG 19
                                        ss; PCR; primer; amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Anti-CMV oligonucleotide #4376.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX17888 standard; DNA; 19 BP.
                                                                                                                                                                                                                             97WO-US015453.
                                                                                                                                                                                                                                                                        96US-0025616P.
                                                                                                                                                                                                                                                                                               96US-0025649P.
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Best Local Similarity 84.2
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                      (CHIR ) CHIRON CORP. (INDV ) UNIV INDIANA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  therapeutic molecule.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human herpesvirus 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-193255/17.
                                                                                                                                  WO9809524-A1
                                                                                                                                                                                                                          02-SEP-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9845314-A1
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                                                                                        Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAX17888;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ч
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 865
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the detection of the presence or absence of chromosomal abnormalities, each abnormality being associated with a condition in a subject and each abnormality being associated with a condition in a subject and each abnormality being associated with a condition in a subject and each carl defined by at least one characteristic nucleic acids derived from a method comprises: (a) obtaining a sample of nucleic acids derived from a subject which may harbour one of the chromosomal abnormalities; (b) subject which may harbour one of the chromosomal abnormalities; (b) crocedure, where a number of the characteristic sequences, if present in a sufficient amount, will be amplified; (c) retrieving the product(s) characteristic of the abnormal sequences to detect the presence or characteristic of the abnormal abnormalities; where the MMA characteristic of the abnormal abnormalities; where the MMA characteristic nucleic acid sequence, and where at least one of the primers defining an end of at least one characteristic nucleic acid sequences cach being determined in their opposite ends by MDP selected from the remainder of the MDP. The methods can be used for detecting chromosomal abnormalities associated with diseases including numerous leukaemia's, lamphoma's, adenocarcinoma's, adenocarcinoma's, and walignant neoplastic conditions and malignant neoplastic conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This sequence represents a primer used in the method of the invention for
                                                           PCR primer; chromosomal abnormality; abnormality detection; leukaemia; lymphoma; carcinoma; adenocarcinoma; sarcoma; glioma; neuroblastoma; medullablastoma; malignant melanoma; malignant neoplastic condition; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  samble
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Detection of chromosomal abnormalities - by subjecting patient nucleic acids to a multiplex molecular amplification procedure primers specific for characteristic nucleic acid sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 19 BP; 4 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                Primer TEL:114U19 for abnormality detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 73; Page 107; 126pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        716 TGGAACATGAAGAGGGGGC 734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19 regaacarcaactectrc 1
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Best Local Similarity 84.2
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                           (PALL/) PALLISGAARD N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1998-333344/29.
                                                                                                                                                                                                                                                                                                                                                                06-DEC-1996;
                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                        WO9824928-A2
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                                                                                                                                                                                                                                                                   11-JUN-1998
                                                                                                                                                        Synthetic
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RESULT 864 AAV26433

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Gaps

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Yoder MC;

linkages. The oligonucleotides are used to inhibit CMV infections (by in vivo or in vitro contact with cells, tissues or body fluids), especially to treat or prevent CMV infections, particularly retinitis

Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;

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Gaps

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Length 19; 3; Indels

Score 14.2; DB 1; Pred. No. 8.4e+02; 0; Mismatches 3;

0.8%;

Query Match
Best Local Similarity 84...,
Thes 16; Conservative

130 CGGATGAAGAAGATCAAAC 148

à

19 CGCAAGAAGAAGAGCAAAC 1

ВР

AAAB2630 standard; DNA; 19

RESULT 867

AAA82630

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Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA polymerase of cytomegalovirus (CMV) and are able to inhibit CMV replication. Optionally the oligonucleotides include at least one 2'-(2-methoxyethoxy) sugar modification or phosphorothicate internucleotide inhages. The oligonucleotides are used to inhibit CMV infections (by in vivo or in viro contact with cells, tissues or body fluids), especially to treat or prevent CMV infections, particularly retinitis
                                                                New antisense oligonucleotides that target cytomegalovirus nucleic acid particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antisense; oligonucleotide; immediate early; DNA polymerase; CMV; cytomegalovirus; inhibition; replication; sugar modification; phosphorothioate; infection; retinitis; ss.
                                                                                                                                                                                                                                                                                                                                                           Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 0 A; 6 C; 3 G; 10 T; 0 U; 0 Other;
Chapman S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Anderson KP, Chapman S;
Anderson KP,
                                                                                                                                      Disclosure; Page 30; 99pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                   131 GGATGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAAGAAGAGAGCAAACG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Anti-CMV oligonucleotide #5481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX17895 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                 0.8%;
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                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kisner DL,
 Kisner DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human herpesvirus 5.
                                  WPI; 1998-568330/48.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX17895
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Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis;

cdk2 ribozyme binding site #67

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Gaps

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04-DEC-2000

AAA82630;

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The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDKI, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seguence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 975 CCGAGACCICAAGCCCCAG 993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGAGACCTTAAACCTCAG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA82663 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   restenosis treatment
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ID AAA8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic acid (AAX1792-X17948) encoding IE (immediate early) 1 or 2, or DNA orid early 1 or 2, or DNA palymerase of cytomegalovirus (CM) and are able to inhibit CMV replication. Optionally the oligonucleotides include at least one 2 - (2 -
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New antisense oligonucleotides that target cytomegalovirus nucleic acid particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina.

WPI; 1998-568330/48.

Claim 7; Page 30; 99pp; English

methoxyethoxy) sugar modification or phosphorothioate internucleotide

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New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.

Disclosure; Page 49; 109pp; English.

Robbins JM;

Barber JR,

Welch PJ,

Tritz R,

(IMMIG-) IMMISOF INC

WPI; 2000-412314/35.

99WO-US028772. 98US-0110954P

06-DEC-1999; 04-DEC-1998;

08-JUN-2000.

WO200032765-A2

Mammalia.

cdk2 ribozyme binding site #100.

(first entry)

04-DEC-2000

AAAB2663

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The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, FONA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in AAA82415 to AAA68797. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                            The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAA8615 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                     hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves encoding a cyclin or cell-cycle dependent kinase other than CDKI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New hairpin and hammerhead ribozyme for inhibiting restenosis, cleave. RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
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                                                                                                                                                                                                                                                                                                                                                                                                           Length 19;
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                                                                                                                                                                                                                                                                                                                                                                                                           Score 14.2; DB 1;
Pred. No. 8.4e+02;
               Robbins JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Robbins JM
                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                               Disclosure; Page 53; 109pp; English.
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               Barber JR,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cdk7 ribozyme binding site #11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
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             Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tritz R, Welch PJ,
                                                    WPI; 2000-412314/35
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA83090 standard;
                                                                                                                            PCNA and Cyclin B1
                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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               Tritz
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
Representative examples of ribozyme recognition sites are given in AAA88415. Co AAA66787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                       Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 cleaves
                                                                                                                                                                                                                                                                                                                                                                                                                                              for inhibiting restenosis, cleave dependent kinase other than CDK1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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Pred. No. 8.4e+02;
0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                       Robbins JM;
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cleaves

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Gaps

New hairpin and hammerhead ribozyme RNA encoding a cyclin or cell-cycle PCNA and Cyclin B1.

Barber JR,

Welch PJ,

Tritz R,

WPI; 2000-412314/35

(IMMU-) IMMUSOL INC

99WO-US028772. 98US-0110954P

06-DEC-1999; 04-DEC-1998;

08-JUN-2000

WO200032765-A2.

Mammalia

Disclosure; Page 49; 109pp; English

1169 GCTGCATCTTCTATGAGAT 1187

0.8%;

Query Match
Best Local Similarity 84.2
Matches 16; Conservative

restenosis treatment

1 GCTGCATCTTTGCTGAGAT 19

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BP.

AAA82895 standard; DNA; 19

RESULT 869 **AAA**82895 cdk4 ribozyme binding site #76.

(first entry)

04-DEC-2000

AAA82895;

99WO-US028772 98US-0110954P

06-DEC-1999;

08-JUN-2000

WO200032765-A2

Mammalia

(IMMU-) IMMUSOL INC

04-DEC-1998;

in

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Page 433

XX So

RESULT 871

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AAA82766

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Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
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84.2%; Pred. No. 8.4e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 55; 109pp; English.
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             cdk6 ribozyme binding site #58
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Best Local Similarity
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                                          Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
); Mismatches 3; Indels
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             BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
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Pred. No. 8.4e+02;
0; Mismatches 3;
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                                                                                                           GCCACCGTCTACAAAGGCA 670
                                                                                                                                        GCCACCGTTTACAAGGCCA 19
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                                                                           Conservative
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                            Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (IMMU-) IMMUSOL INC.
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Best Local Similarity
Matches 16; Conserv
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RESULT 872

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designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.

Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
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  Score 14.2; DB 1; Length 1 Pred. No. 8.4e+02; 0; Mismatches 3; Indels
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Pred. No. 8.4e+02;
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                                                                                1167 GGGCTGCATCTTCTATGAG 1185
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                                                                                                                       GGGCTGCATCTTTGCTGAG 19
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                      84.28;
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Query Match
Best Local Similarity
Matches 16; Conserv
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Representative examples of ribozyme recognition sites are given in AAA82415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in restenosis treatment
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                                       New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
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RNA encoding a cyclin or cell-cycle dependent kinase other than CDKL,
PCNA and Cyclin B1.
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14.2%; Pred. No. 8.4e+02;
ve 0; Mismatches 3; Indels
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                                                                                                                       Disclosure; Page 49; 109pp; English
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  WPI; 2000-412314/35
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Best Local Similarity
Matches 16; Conserv
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AAA82662;

RESULT 874 AAA82662

à 셤 Mammalia

Tritz R,

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10017621-381.rng

Page 435

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RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VHalphaTAG; anti-tumour associated sialylated glycoprotein antigen;
TAG-72; variable region; heavy chain; carcinoma; detect; tumour; ss;
mouse-human chimeric antibody; therapeutic agent; intraoperative therapy;
                                                                                                                                                                                                                                                                                 'n
                                                                                                                                                                                                                         The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in
Ribozyme, hairpin, hammerhead, gene therapy, vasotropic, restenosis, ss.
                                                                                                                                                                  New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                    Representative examples of ribozyme recognition sites are given in AAA88215 to AA88787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient
                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                               Length 19;
                                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                            Score 14.2; DB 1;
Pred. No. 8.4e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Primer 1 used in the sequencing of VHalphaTAG.
                                                                                                                               Robbins JM
                                                                                                                                                                                                        Disclosure; Page 56; 109pp; English
                                                                                                                                                                                                                                                                                                                                                                    TGCCACCGTCTACAAAGGC 669
                                                                                                                               Welch PJ, Barber JR,
                                                                                                                                                                                                                                                                                                                                                                                       receaceerrineengece 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             88US-00259943.
88US-00261942.
89US-00424362.
93US-00040687.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-00822028
                                                                                                                                                                                                                                                                                                                               0.8%;
                                                                        99WO-US028772
                                                                                           98US-0110954P
                                                                                                                                                                                                                                                                                                                                                                                                                                     AAZ40735 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-FEB-2000 (first entry)
                                                                                                                                                                                                                                                                                                                            Ouery Match
Best Local Similarity 84.2
Matches 16, Conservative
                                                                                                                                                                                                                                                                                            restenosis treatment
                                                                                                             (IMMU-) IMMUSOL INC.
                                                                                                                                                   WPI; 2000-412314/35.
                                    WO200032765-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-OCT-1988;
19-OCT-1989;
                                                                                           04-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAR-1993;
                                                                        06-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US5993813-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-0CT-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-NOV-1999
                                                      08-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                    651
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ40735;
                                                                                                                                Fritz R,
                  Mammalia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          primer
                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 877
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Thimers have to be a sociated state of the variable states to a mew anti-tumour associated stalylated glycoprotein antigen (TAG)-72 mouse-human chimeric antibody. The variable region has a heavy chain (VH) where VH is encoded by a DNA sequence homologous to the VHalphaTAG germline gene (AAZ40701). The invention includes a method for in vivo carcinoma targeting through the administration to an animal of an anti-TAG-72 mouse-human chimeric attibody produced by specific cell lines. The antibody or a fragment are conjugated to an imaging marker or therapeutic agent, in a pharmaceutically acceptable, nontoxic, sterile carrier. The chimeric antibody binds to TAG-72 which is found on certain human tumour cells. The tissue regions containing the tumours can be detected via the markers and/or can be treated via the therapeutic agents. The method is useful for in vivo diagnosis and treatment of cancer by administering to an animal an effective amount of a composition for the in situ detection of carcinoma lesions. The method is useful for intraoperative therapy, consisting of locating the position of a tumour through the amount
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                             Primers AAZ40735-Z40740 are used to sequence the VHalphaTAG germline
                                                                                                                                                                                                                                oŧ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       diabetes; allergy; chronic myelogenous leukaemia; PCR primer; ss.
                                                                                                                                                                                                                         New mouse-human chimeric antibody, useful for in vivo diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                      Anderson WHK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.2; DB 1; Length 19;
14.2%; Pred. No. 8.4e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19 BP; 4 A; 5 C; 2 G; 8 T; 0 U; 0 Other;
                                                                  Kaplan DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCR primer specific for IFNa2 gene SEQ ID 51.
                                                                  Schlom J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1293 GTCCAACGAGGAGTTCAAG 1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lafleur DW;
                                                                                                                                                                                                                                                                                                                             37; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAF72367 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19 GIACAATGAGAAGITCAAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 84.2
Matches 16; Conservative
                                                                      Gourlie BB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Moore PA,
(DOWC ) DOW CHEM CO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-138557/14
                                                                                                                                                                WPI; 2000-038240/03
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                                                                                                                                                                                                                                                                                                                             Example; Col
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21-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-APR-2001
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                                                               Mezes PS,
Rixon MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ruben SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF72367;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                          cancer.
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AAF91205;
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                                                                                                          Query Match
                                                                                                                                     Matches
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AAF91205
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                                                                                      This invention relates to human polynucleotide sequence AAF72333 which encodes keratinocyte derived interferon (KDI) protein AAB49774, which is a member of the interferon family. AAF72338 represents the codon optimised sequence of KDI. The human KDI gene is located on chromosome 9. The specification includes KDI related protein sequences AAB49775 - AAB49789. Also given in the specification are primer, probe and polynucleotide sequences represented by AAF72334 +AAF72370 (excluding AAF72338) which are used in the isolation and characterisation of the sequence of the invention. The KDI polypeptide is used to treat viral infections and the protein and polynucleotide may be used to prevent, treat or ameliorate a medical condition such as immune system-related disorder, viral infection, viral exposure and cancer in a mammal. Specific disorders which can be treated by KDI include multiple should the context of mammal and a specific disorders which can be treated by KDI include multiple should in the context of mammal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention provides nucleotides encoding molecular variants of
        Isolated keratinocyte derived interferon protein and polynucleotide used to prevent, treat or ameliorate an immune system-related disorder, viral infection, viral exposure and cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New polynucleotide encoding a molecular variant Multi Drug Resistance (MDR)-1 polypeptide is useful for diagnosing and treating diseases associated with abnormal MDR-1 expression or function, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MDR-1; multi drug resistance-1; drug uptake; disease; cancer; matory disease; neuronal disease; CNS disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human multi drug resistance-1 gene related sequence SEQ ID NO: 293.
                                                                                                                                                                                                                                                                                     hepatitis, Cryptosporidium parvum infection, chronic myelogenous
leukaemia, arthritis, diabetes and allergies
                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                         0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Roots I;
                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cardiovascular disease; PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
                                                                  Page 187; 303pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; Page 137; 154pp; English
                                                                                                                                                                                                                                                                                                                                                                                                               926 TCCAGCTGCTCCGTGGCCT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                     19 TCAAGCTGCTCTGTGGGCT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF91206 standard; DNA; 19
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                         Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-159855/16.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-FEB-2001
                                                                Example 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 879
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the human multi drug resistance-1 (MDR-1) protein. These can be used to identify compounds capable of treating multidrug resistance and sensitivity interfering resulting from polymorphisms in MDR-1, which can lead to difficulties in treating cancer, cardiovascular, neuronal, inflammatory and CNS diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New polynucleotide encoding a molecular variant Multi Drug Resistance (MDR)-1 polypeptide is useful for diagnosing and treating diseases associated with abnormal MDR-1 expression or function, e.g. cancer.
                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human, MDR-1, multi drug resistance-1; drug uptake, disease, cancer, inflammatory disease, neuronal disease, CNS disease, cardiovascular disease, PCR primer; ss.
                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human multi drug resistance-1 gene related sequence SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                       Length 19;
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                                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
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Pred. No. 8.4e+02;
0; Mismatches 3;
                                                                                                                                                                                Sequence 19 BP; 6 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                       Score 14.2; DB 1;
Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Brinkmann U, Hoffmeyer S, Eichelbaum M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
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                                                                                                                                                                                                                                                                                                                                                             388 TCCTCGGATGAGGTGCAGT 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        388 TCCTCGGATGAGGTGCAGT 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rccrcrcaggargragr 19
                                                                                                                                                                                                                                                                                                                                                                                                                    19 rccrcrcagarararacagr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-JUL-2000; 2000WO-EP007314.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JUL-1999; 99EP-00114938
22-FEB-2000; 2000EP-00103361
                                                                                                                                                                                                                                                                   84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.88;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF91205 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                     16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-159855/16.
                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200109183-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-FEB-2001
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Human, ribozyme therapy, hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoritasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antistickling; ophthalmological; keracolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.

Cell-cycle dependent kinase cdk6 ribozyme binding site SEQ ID NO:584.

(first entry)

10-SEP-2001

AAH58160;

AAH58160 standard; DNA; 19 BP

RESULT 882

AAH58160

10017621-3sl.rng

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Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                         Human, ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MWP; matrix metalloproteinase; growth factor; reductase; scarring, cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:352.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.2; DB 1; Length 19;
84.2%; Pred. No. 8.4e+02;
Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 2 A; 8 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 97; 408pp; English.
              AAH57928 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                       26-OCT-2000; 2000WO-US029500.
                                                                                                                                                                                                                                                                                                                                                                                                                   99US-0161532P
                                                                     10-SEP-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Robbins JM, Tritz R;
                                                                                                                                                                                                                                                                                                                                                                                                                                               (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-300427/31.
                                                                                                                                                                                                                                                                                                                                 WO200130362-A2.
                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                    26-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                           03-MAY-2001
                                                                                                                                                                                                                                                                                                       Synthetic.
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26-OCT-2000; 2000WO-US029500.

WO200130362-A2.

03-MAY-2001.

Homo sapiens.

Synthetic.

Robbins JM, Tritz R; WPI; 2001-300427/31.

(IMMU-) IMMUSOL INC.

26-OCT-1999;

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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a citozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, anticidabetic, antidabetic, antidamentally and encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
scar. AAH57577 to AAH62099 represent sequences used in the
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                                                                                                                                                                   Match 0.8%; Score 14.2; DB 1; Length 19; Local Similarity 84.2%; Pred. No. 8.4e+02; tes 16; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                              1028 TGGCTGACTTTGGCCTGGC 1046
                                                                                                                                                                    Query Match
                                                                                                                                                                          Matches
à
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0
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Gaps

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16; Conservative

Best Local Similarity

Matches

5

Query Match

.. 0 Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases. cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (11) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and to reborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar AAH57577 to AAH62099 represent sequences used in the The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme [1] which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I) (I) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and Gaps Sequence 19 BP; 1 A; 7 C; 5 G; 6 T; 0 U; 0 Other; exemplification of the present invention Example 1; Page 114; 408pp; English.

10017621-381.rng

1 TCGCTGACTTCGGCCTTGC 19

Ωp

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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloprotenase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, ophthalmological, cytostatic, antiseborrheic, antidiabetic, antisickling, dermatological, cytostatic, antiseborrheic, antidiabetic, and encoding cytokine involved in inflammation. (I) can be used cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatities, actinic keracosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, virecenting and terinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
                                                                                                                                                                                                                                                                                                                      matrix metalloproteinase, growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                            Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     s keloid, adhesion and hypertrophic or hypertrophic burn to AAH62099 represent sequences used in the
                                                                                                                                                                                 Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:676.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 5 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 121; 408pp; English.
                                               AAH58252 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-OCT-2000; 2000WO-US029500.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-0161532P.
                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-300427/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (IMMU-) IMMUSOL INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                       10-SEP-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Robbins JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                            AAH58252;
RESULT 883
                       AAH58252
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytcokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, cleaves RNA encoding (I) are useful for treating proliferative skin classases such as psoriasis, atopic dermatitis, actinic keratosis, diseases such as psoriasis, atopic dermatitis, actinic keratosis, aguamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn and such as fall and the sequences used in the
                                                                                                                                                                                                                                                                                                                                                 recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermattits; actinic keratosis; squamous cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                      Cell-cycle dependent kinase cdk7 ribozyme binding site SEQ ID NO:675.
                                                                                                                                                                                                                                                                                                                                 Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 19 BP; 4 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  exemplification of the present invention
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                                         1 GCCACCGTTTACAAGGCCA 19
                                                                                                                                                        BP.
652 GCCACCGTCTACAAAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-0CT-2000; 2000WO-US029500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99US-0161532P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sickle cell retinopathy; ss.
                                                                                                                                                        AAH58251 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-300427/31.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-OCT-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                    AAH58251;
                                                                                                               RESULT 884
                                                                                                                                      AAH5825
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0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02;

Query Match Best Local Similarity

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Gaps .

0.8%; Score 14.2; DB 1; Length 19; 44.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels

84.2%;

Query Match 0.8 Best Local Similarity 84.2 Matches 16; Conservative

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Gaps

.. 0

Length 19;

Score 14.2; DB 1; Length 1 Pred. No. 8.4e+02; 0; Mismatches 3; Indels

84.2%;

Similarity

Query Match Best Local Simil Matches 16; C

Conservative

1158 GTGGGGTGTGGCTGCATC 1176 Grécagrerredererre 19

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                                                                                                                                                                                                                                                                                                                           Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; sporiasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which cleaves RNA encoding a cytchine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, dermatclogical, cytostatic, antiesborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can
                                                                                                                                                                                                                                                                                        Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:481.
Gaps
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Indels
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ن
0; Mismatches
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                                    651 TGCCACGTCTACAAAGGC 669
                                                                           TGCCACCGTTTACAAGGCC 19
                                                                                                                                                                        AAH58057 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-OCT-2000; 2000WO-US029500.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-0161532P
                                                                                                                                                                                                                                                    10-SEP-2001 (first entry)
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Robbins JM, Tritz R;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200130362-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-OCT-1999;
16;
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Matches
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matrix metalloproteinase, growth factor; reductase; scarring, cytostatic, antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide, antisickling; ophthalmological; keratolytic; gene therapy, viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma;

sickle cell retinopathy; ss.

Homo sapiens.

Synthetic.

26-OCT-2000; 2000WO-US029500.

WO200130362-A2

03-MAY-2001

99US-0161532P.

26-OCT-1999;

(IMMU-) IMMUSOL INC.

Human, ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;

Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:216.

(first entry)

10-SEP-2001

AAH57792;

BP.

AAH57792 standard; DNA; 19

RESULT 886

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Example 1; Page 87; 408pp; English
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also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing

scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention

7 T; 0 U; 0 Other;

Sequence 19 BP; 2 A; 2 C; 8 G;

inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent Kinase, growth factor or a reductase, or administering a chependent Kinase, growth factor or a reductase, or administering a mucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, coptublished or actionatelogical, cytostatic, antiseborrheic, antibiobetic, antisickling, dermatological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keracosis.

Citatopathy, vitreoretinopathy, sickle cell retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar, AAHS5777 to AAH62099 represent sequences used in the Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases. The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a exemplification of the present invention Tritz R; WPI; 2001-300427/31. Robbins JM,

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exemplification of the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:217.
                                                                                                                                                                Gaps
                                                                                                                                                            .
0
                                                                    0.8%; Score 14.2; DB 1; Length 19;
llarity 84.2%; Pred. No. 8.4e+02;
Conservative 0; Mismatches 3; Indels
Sequence 19 BP; 6 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                    993
                                                                                                                                                                                                                                                                                                            cceacaccitaaaccicae 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAH57793 standard; DNA; 19 BP.
                                                                                                                                                                                                                                975 CCGAGACCTCAAGCCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-OCT-2000; 2000WO-US029500
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
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                                                                Query Match
Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAH57793;
                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAH57793
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The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (I) which claeves RNA encoding a cytckine involved in inflammation, matrix metalloproteinase (WMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipsoriatic, antistering of chratcological, cytostatic, antisebornheic, antidabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and classes RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) and ensure useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can slobe used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell reinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, ribozyme therapy, hairpin ribozyme, hammerhead ribozyme, recognition site, target, ribozyme binding site, eye disease, vulnerary, proliferative disease, skin disease, psoriasis, diabetic retinopathy, cytokine, inflammation, cell-cycle dependent kinase, cyclin, MMP, matrix metalloproteinase, growth factor; reductase, scarring, cytostatic, antipsoriatic, dermatological, antiseborrheic, antidiabetic; virucide, antisickling, ophthalmological, keratolytic, gene therapy, viral wart, atopic dermatitis, actinic keratosis, squamous cell carcinoma; basal cell carcinoma; seborrheic wart, vitreoretinopathy; scar, sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                        Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:249.
                                                                                       0
                                              Length 19;
                                                                                       3; Indels
Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;
                                           Score 14.2; DB 1;
Pred. No. 8.4e+02;
                                                                                       0; Mismatches
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                                                                                                                                   976 CGAGACCTCAAGCCCCAGA 994
                                                                                                                                                                             1 céacaccriraaaccricaga 19
                                                                                                                                                                                                                                                                                       AAH57825 standard; DNA; 19 BP
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                                                              84.2%;
                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                           Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tritz R;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (11) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keractolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (11) are useful for treating proliferative skin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic
scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the exemplification of the present invention
                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cell-cycle dependent kinase cdk2 ribozyme binding site SEQ ID NO:248.
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0
                                                                                                                           DB 1; Length 19;
                                                                                                                                                                  3; Indels
                                                                                  Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                       Score 14.2; DB 1;
Pred. No. 8.4e+02;
0; Mismatches 3
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                                                                                                                                                                                                            1169 GCTGCATCTTCTATGAGAT 1187
                                                                                                                                                                                                                                                   1 GCTGCATCTTTGCTGAGAT 19
                                                                                                                                                                                                                                                                                                                                                           AAH57824 standard; DNA; 19 BP.
                                                                                                                         0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sickle cell retinopathy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                         10-SEP-2001 (first entry)
                                                                                                                         Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Robbins JM, Tritz R;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, dermatcological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and virucide activities, and elaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis,
retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treathing and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAHS7577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                             Gaps
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0
                                                                                                                                                               0.8%; Score 14.2; DB 1; Length 19;
84.2%; Pred. No. 8.4e+02;
ive 0; Mismatches 3; Indels
                                                                                                                           Sequence 19 BP; 2 A; 4 C; 7 G; 6 T; 0 U; 0 Other
                                                                                  exemplification of the present invention
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                                                                                                                                                                                                                                                      1167 GGGCTGCATCTTCTATGAG 1185
                                                                                                                                                                                                                                                                                            1 GGCTGCATCTTTGCTGAG 19
                                                                                                                                                                                                                                                                                                                                                                                                    AAH57826 standard; DNA; 19 BP.
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                                                                                                                                                                                                             Matches 16; Conservative
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                                                                                                                                                                                         Local Similarity
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           also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AAH57577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Collection of binding groups for determining or typing samples, especially clinical samples, has groups capable to identify essentially all members of the family of nucleic acids of relatively high
                                                                                                                                                                                                                                                                                                                                                             HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:81.
                                                                                                                                                             Gaps
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basal cell carcinoma and viral or seborrheic wart.
                                                                                                                                                                                                                                                                                                                                                                                         Binding molecule, HIV-1; human immunodeficiency virus type 1;
                                                                                                                                   Length 19;
                                                                                                                                                             Indels
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                                                                                                        Sequence 19 BP; 3 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                   Score 14.2; DB 1;
Pred. No. 8.4e+02;
                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                     reverse transcriptase; binding group; ss.
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                                                                              exemplification of the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 26; 166pp; English.
                                                                                                                                                                                     1170 CTGCATCTTCTATGAGATG 1188
                                                                                                                                                           0;
                                                                                                                                                                                                                19
                                                                                                                                                                                                                                                                                                                                                                                                                                Human immunodeficiency virus 1.
                                                                                                                                                                                                                crecarcirrecreagare
                                                                                                                                   0.8%;
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                                                                                                                                                                                                                                                                                 ABL88859 standard; DNA; 19
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                                                                                                                                                             Conservative
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                                                                                                                                 Query Match
Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EP1174518-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Collection of binding groups for determining or typing samples, especially clinical samples, has groups capable to identify essentially all members of the family of nucleic acids of relatively high
                                                            Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:79.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        oligonucleotide sequences used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Binding molecule, HIV-1; human immunodeficiency virus type 1; reverse transcriptase; binding group; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
0; Mismatches 3; Indels
      Length 19;
                                                         Indels
Score 14.2; DB 1;
Pred. No. 8.4e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seguence 19 BP; 8 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Goudsmit J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 26; 166pp; English.
                                                                                                                   1505 CCATATTTGCACTAAAGGA 1523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1505 CCATATTTGCACTAAAGGA 1523
                                                                                                                                                                             19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CAATATTTGCCATAAAGGA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human immunodeficiency virus 1.
                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-JUL-2000; 2000EP-00202611.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-JUL-2000; 2000EP-00202611.
                                                                                                                                                                                CCATATTTGCCATAAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%;
0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Loukachov VV, Van Gemen B,
                                                                                                                                                                                                                                                                                                                            ABL88857 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-156696/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EP1174518-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    significance
                                                                                                                                                                                                                                                                                                                                                                                                                                            22-MAY-2002
                                                         16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention
                                                                                                                                                                                                                                                                                                                                                                                     ABL88857;
      Query Match
                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                             ABL88857
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Collection of binding groups for determining or typing samples, especially clinical samples, has groups capable to identify essentially all members of the family of nucleic acids of relatively high
                                                                                 HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:73.
                                                                                                   Binding molecule, HIV-1; human immunodeficiency virus type 1; reverse transcriptase; binding group; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 10 A; 2 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                 (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
                                                                                                                                                                                                                                                                    Goudsmit J;
                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 24; 166pp; English
                                                                                                                                  Human immunodeficiency virus 1.
                    ABL88851 standard; DNA; 19 BP.
                                                                                                                                                                                                        20-JUL-2000; 2000EP-00202611
                                                                                                                                                                                                                             20-JUL-2000; 2000EP-00202611
                                                                                                                                                                                                                                                                    Van Gemen B,
                                                            (first entry)
                                                                                                                                                                                                                                                                                        WPI; 2002-156696/21.
                                                                                                                                                                                                                                                                    Loukachov VV,
                                                                                                                                                                                                                                                                                                                                            significance.
                                                             22-MAY-2002
                                                                                                                                                                EP1174518-A1
                                                                                                                                                                                     23-JAN-2002.
                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention
                                         ABL88851;
RESULT 893
ABL88851
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The present invention describes a collection of binding groups for a family of nucleic acids comprising members of relative high and relative low significance, where the binding groups are selected to be capable to identify, alone or in combination, essentially all members of the family of nucleic acids of relatively high significance. The collection of binding groups is useful for typing of nucleic acid in a clinical sample, by contacting the nucleic acid with the collection and determining whether one or more binding groups bound to the nucleic acid of the comprises at least a part of a member of relatively high significance of a family of nucleic acids. The collection of binding groups is useful for determining whether the sample a family of nucleic acids. ABL88779 to ABL89321 represent oligonucleotide sequences used in the exemplification of the present

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Gaps
                              ;
 Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
0; Mismatches 3; Indels
 0.8%;
Query Match
Best Local Similarity 84.2 Matches 16; Conservative
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1505 CCATATTTGCACTAAAGGA 1523 CAATATTTGCAATAAAGAA 19

ð g

AAD36056 standard; DNA; 19 09-AUG-2002 AAD36056 AAD36056/c ID AAD360 XX AC AAD360 XD 09-AUG

RESULT 894

ACC47620 standard; DNA; 19

RESULT 895

ACC47620

11-SEP-2003 (first entry)

ACC47620;

HXXXH

(first entry)

The invention relates to cDNA, protein sequence and genomic structure of the human cardiac isoform of myosin light chain kinase (CMLCK) and mutations in CMLCK gene that are associated with cardiac dysfunction. The invention also relates to methods for identifying agents that modulate comnect activity. The method susceptibility of a subject to cardiac dysfunction. CMLCK is useful for screening for an expect that modulates its biological activity. The method is useful for enhancing or preserving cardiac function in a subject having cardiac dysfunction, and harbouring a mutation in CMLCK allele. The method is useful for enhancing or preserving cardiac function in a subject having cardiac dysfunction such as systolic dysfunction, diastolic dysfunction, cardiac dysfunction which comprises valvular heart disease function, or congestive heart failure, or for preserving cardiac function, or cardiac dysfunction which comprises valvular heart disease such as mitral valve disease, tricuspid valve disease, mitral cardiac dysfunction, or congestive heart failure or method is useful for traating cardiac dysfunction, or congestive heart disease, cardiac dysfunction, or congestive heart failure. The method is useful for traating cardiac dysfunction, or congestive heart failure. The cardiomyopathy, myocardial infarction, or congestive heart failure. The present sequence is a PCR primer used to amplify rabbit skeletal muscle ., 0 New isolated cardiac myosin light chain kinase (cMLCK) protein, useful for identifying cMLCK modulators that are used for treating cardiac dysfunction e.g. systolic or diastolic dysfunction, myocardial Gaps Rabbit; cardiac myosin light chain kinase; cMLCK; tricuspid valve; cardiac dysfunction; systolic dysfunction; mitral valve prolapse; diastolic dysfunction; cardiac hypertrophy; tricuspid insufficiency; coronary heart disease; myocardial infarction; mitral insufficiency; valvular heart disease; congestive heart failure; mitral valve; 0; Rabbit skeletal muscle MLCK DNA amplifying downstream primer. 0.8%; Score 14.2; DB 1; Length 19; 44.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels Davis JS; Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other; Hassanzadeh S, Winitsky S, cardiomyopathy; cardiant; PCR; primer; ss (USSH ) US DEPT HEALTH & HUMAN SERVICES. Disclosure; Page 28; 105pp; English. 969 GCTACACCGAGACCTCAAG 987 19 gerecaceredacercase 1 12-SEP-2001; 2001WO-US028639. 12-SEP-2000; 2000US-023246P. 13-SEP-2000; 2000US-0232456P. 84.2%; 16; Conservative Oryctolagus cuniculus. WPI; 2002-394135/42. Local Similarity WO200224889-A2 Epstein ND, 28-MAR-2002 infarction Query Match Matches ò 셤 Kreek MJ;

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Novel isolated variant allele of human serotonin 1B receptor gene useful for determining susceptibility to addictive, neurologic or psychiatric conditions or diseases in a subject.
                                                                                                  15-MAY-2000; 2000US-0204169P
                                                                       15-MAY-2001; 2001US-00855991
                                                                                                                                                                                         Cigler T, Laforge KS,
                                                                                                                            (CIGL/) CIGLER T.
(LAFO/) LAFORGE K S.
(KREE/) KREEK M J.
                                                                                                                                                                                                                    WPI; 2003-102507/09.
               US2002142312-A1
                                            03-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABT21583;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Blakeslea trispora. The carry gene (ACC4761) encodes a bifunctional enzyme, lycopene cyclase/phytoene synthase (ABP97464), and the carB gene (ACC47618) encodes a bifunctional (ACC47618) encodes phytoene dehydrogenase (ABP97464), and the carB gene encompasses plasmids for the expression of additional copies these genes, and plasmids for the expression of heterologous genes under the control of the carRP or the carB promoter. The carRP and carB genes can be oversypressed to increase production of beta-carctene in B. trispora, or to modify the beta-carctene biosynthetic pathway to create B. trispora strains able to produce other carctenids such as lycopene. The promoters of these genes may also be used to control expression of heterologous genes such as the Streptoalloteichus hindustamus bleomycin resistance gene (blen) in B. trispora. Sequences ACC47619-ACT47610 represent Mucor circinelloides carRP PCR primers used to generate a probe used in the isolation of Blakeslea trispora DNA fragments containing both the carRP
                                                                                                                                                                                                                                                                                                                                                                                                                                        invention relates to beta-carotene biosynthetic genes from the fungus
                                                                                                                                                                                                                                                                                                                                                   New carRP and carB genes from Blakeslea trispora, useful for increasing production of beta-carotene or other carotenoids, also related vectors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Single nucleotide polymorphism; analgesic; variant allele; A-161T; human serotonin 1B receptor gene; addictive disease; neurologic; psychiatric condition; pain reliever; analgesia; PCR; primer; ss.
                                         Beta-carotene, biosynthesis; biosynthetic pathway; carotenoid; Blakeslea trispora; carRP; bifunctional enzyme; lycopene cyclase; phytoene synthase; carB; phytoene dehydrogenase; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human serotonin 1B receptor gene PCR primer, SEQ ID No 7.
             Mucor circinelloides carRP PCR primer #62, SEQ ID NO:6.
                                                                                                                                                                                                                                                                              Diez Garcia B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19 BP; 4 A; 9 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and carB genes in an example from the invention
                                                                                                                                                                                                                                                                             Rodriguez Saiz M, Marcos Rodriguez AT, Die
De La Fuente Moreno JL, Barredo Fuente JL;
                                                                                                                                                                                                                                                                                                                                                                                                              Example 2; Page 41; 50pp; Spanish.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1354 CACGCACCCCGACTTGATA 1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAL53983 standard; DNA; 19 BP.
                                                                                                                                                                                        26-SEP-2002; 2002WO-ES000452.
                                                                                                                                                                                                                    26-SEP-2001; 2001ES-00002161
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                 (ANTI ) ANTIBIOTICOS SAU.
                                                                                                  Mucor circinelloides
                                                                                                                                                                                                                                                                                                                       WPI; 2003-313642/30
                                                                                                                                                                                                                                                                                                                                                                                 and polypeptides.
                                                                                                                               WO2003027293-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-FEB-2003
                                                                                                                                                            03-APR-2003
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serotonin 1B receptor gene, comprising a DNA sequence having a variation in a sequence of 1749 base pairs defined in the specification, where the variation comprises A-161T. The human serotonin 1B receptor gene is useful for determining a susceptibility in a subject to at least one addictive disease, neurologic or psychiatric condition or disease. The addictive disease comprises opioid addiction, cocaine addiction, or addiction to other psychostimulants, nicotine addiction, barbiturate or sedative hypotonic addiction, anxiolytic addiction, or alcohol addiction. The neurologic or psychiatric condition or disease is anxiety, depression, pathological aggression, or compulsive gambling. The human serotonin 1B receptor gene is also useful for determining a therapeutic analgesia. This polynucleotide sequence represents a PCR primer of the human serotonin 1B receptor gene of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Racing potential; horse; grandpaternal DNA; over-represented; breeding; grandmother; performance; progeny horse; PCR; primer; ss.
                                                                  The invention relates to a novel isolated variant allele of the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.2; DB 1; Length 19;
84.2%; Pred. No. 8.4e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 19 BP; 7 A; 2 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   124 ATGGATCGGATGAAGAGA 142
Example; Page 12; 20pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Multiplex group PCR primer #330.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABT21583 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-MAY-2001; 2001GB-00011886.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  84.28;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
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Example 2; Page 25; 49pp; English
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20-JAN-2000; 2000US-00487792.
20-JAN-2000; 2000WO-US001239.
21-JUL-2000; 2000US-0219621P.
                                                                                                                                                                                                                                                                                                                                                                                                          2001US-0292934P
                                                                                                                                                                                                                                                                                                                                                                                                                      (HUMA-) HUMAN GENOME SCI INC
                                                                                                                                                                                                                                                                                                                                                            20-JUL-2001; 2001US-00908594
                                                                                                                                                                                                                                               17-APR-2003 (first entry)
                                                                                                                                                              Best Local Similarity 84.2
Matches 16; Conservative
                Swinburne JE;
                          WPI; 2003-129314/12.
                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                             21-JUL-1999;
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                                                                                                                                                                                                                                                                                                                                     US6472512-B1
                                                                                                                                                                                                                                                                                                                                                                       21-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                 29-OCT-2002,
                Binns MM,
                                                                                                                                                                                                                                    ABX11035;
                                                                                                                                                         Query Match
                                                                                                                                                                                                             RESULT 898
                                                                                                                                                                                                                   ABX11035
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derived interferon (KDI) protein, and the polynucleotide sequences encoding it. The gene encoding human KDI maps to chromosome 9. The novel KDI protein is a member of the interferon family. The invention also describes vectors, host cells, and recombinant methods for producing the KDI protein. The invention also discloses methods for identifying agonists and antagonists of KDI activity. An antibody that binds to the KDI protein, the KDI polypeptide sequence, and the polynucleotide sequence encoding KDI are useful in the diagnosis, prevention and treatment of disorders associated with the aberrant expression of the KDI protein, such as disorders of the immune system, inflammation, cancer, blood disorders, cardiovascular disorders, cerebrovascular diseases, wounds, neurological diseases, bacterial or viral infections and blood vessel growth inhibition. The present sequence represents a PCR primer used in a quantitative PCR (QPCR) reaction in the examples of the present New isolated antibody that binds a keratinocyte derived interferon (KDI) protein, for the diagnosis, prevention and treatment of disorders with aberrant expression of the KDI protein, such as disorders of the immune The present invention relates to the isolation of human keratinocyte 0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02; ive 0; Mismatches 3; Indels Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other; (EPID-) EPIDAUROS BIOTECHNOLOGIE AG Example 5; Col 166; 147pp; English. 926 TCCAGCTGCTCCGTGGCCT 944 19 rczacrecrererecer 1 ACF62640 standard; DNA; 19 BP 23-JUL-2002; 2002WO-EP008219. 23-JUL-2001; 2001EP-00117608 24-MAY-2002; 2002EP-00011710 (first entry) Conservative Lafleur DW, Moore PA, WPI; 2003-227870/22. Local Similarity nes 16; Conserv WO2003013534-A2. 08-OCT-2003 20-FEB-2003 Synthetic. ACF62640; Query Match system. Best Loc Matches RESULT 899 ACF62640 8 셤 . 0 The invention relates to a novel method for determining racing potential of a horse. The method comprises measuring: whether grandpaternal DNA is over-represented in the genome of the horse; or in the case where one of the grandmothers was selected for breeding on the basis of racing performance, whether grandmaternal DNA from the selected grandmother is over-represented in the genome of the horse which indicates that the horse has good racing potential. The method of the invention is useful for determining the racing potential of a horse or for obtaining a progeny horse with good racing potential. This polynucleotide sequence represents a PCR primer used in the detection method of over-represents and processing the grandparents of the invention Human; keratinocyte derived interferon; KDI; immune system disorder; inflammation; cancer; blood disorder; cardiovascular disorder; cerebrovascular disease; wound; neurological disease; viral infection; bacterial infection; blood vessel growth inhibition; immunomodulatory; antiinflammatory; vasotropic; haemostatic; cardiant; vulnerary; cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; antiarteriosclerotic; cytostatic; quantitative PCR; QPCR; IFNa2; primer; Determining the racing potential of a horse comprises measuring whether grandpaternal or grandmaternal DNA from the selected grandmother DNA is over-represented in the genome of the horse. Human IFNa2 specific PCR primer #2 used in quantitative PCR reaction. Gaps .; 0 0.8%; Score 14.2; DB 1; Length 19; 14.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels Sequence 19 BP; 5 A; 5 C; 4 G; 5 T; 0 U; 0 Other; (ANIM-) ANIMAL HEALTH TRUST. (BRHO-) BRITISH HORSERACING BOARD. 194 CCAAIGGIGCCCCTGAGCA 212 1 ccaarderrecrercada 19 98US-0093643P 99US-00358587, 84.2%;

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Gaps

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New use of irinotecan for preparation of compositions for treating cancer in subject having genome with variant allele comprising cytochrome p450, subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
                                                                         Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;
cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;
cytostatic; PCR primer; ss.
                                                    Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:469.
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Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                        cure present invention describes the use of irinotecan (I) or its derivative for the preparation of a pharmaceutical composition for treating colorectal, gastric, lung ovarian or paroreatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprises a cytcchrome p450, subfamily IIIA (nifedipine cytostatic activity. The therapeutic applications of (I) is improved, cytostatic activity. The therapeutic applications of (I) is improved, conce it is possible to individually treat a subject with an appropriate dosage and/or an appropriate derivative of (I). Therefore, undesirable, continuing the amplication of those subjects who do not respond to the treatment with substances (nonresponders), as well as the development of drug resistances due to suboptimal drug dosing can be avoided. ACF62200 to ACF62751 and ABM34912 to ABM35013 represent sequences used in the exemplification of the present increase.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     derivative for the preparation of a pharmaceutical composition for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprises a cytochrome p450, subfamily IIIA (nifedipine oxidase), polypeptide 5 (CYP3AS) polynucleotide (II). (I) and (II) have
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma; cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:470.
                                                                                                                                                                                                                                                                              0.8%; Score 14.2; DB 1; Length 19;
44.2%; Pred. No. 8.4e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                       Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                             exemplification of the present invention
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            Disclosure; Page 44; 86pp; English.
                                                                                                                                                                                                                                                                                                                                    388 TCCTCGGATGAGGTGCAGT 406
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24-MAY-2002; 2002EP-00011710
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ID ACF62641 standard; DNA; 19
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Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                         potentially harmful treatment of those subjects who do not respond to the treatment with substances (nonresponders), as well as the development of drug resistances due to suboptimal drug dosing can be avoided. ACF62200 to ACF62751 and ABM34912 to ABM35013 represent sequences used in the
cytostatic activity. The therapeutic applications of (I) is improved, since it is possible to individually treat a subject with an appropriate dosage and/or an appropriate derivative of (I). Therefore, undesirable, harmful or toxic effects are efficiently avoided. Unnecessary and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            irinotecan; colorectal cancer; cervical cancer; gastric cancer;
lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
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Pred. No. 8.4e+02;
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24-MAY-2002; 2002EP-00011710.
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Best Local Similarity 84.2
Matches 16; Conservative
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The present invention describes a method for the use of irinotecan (I) or treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant gloma a subject having a genome with a variant allele which comprises a multidrug resistance protein 1 (MRP1) golynucleotide (II). (I) has cytostatic activity. (I) or its derivative can be used for the preparation of a pharmaceutical composition for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject, where the subject is a human (preferably African or Asian) or a mouse. The present sequence represents a sequence which is used in the exemplification of the present invention.
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                                                                                                                                                                                                                                                                                                                                       irinotecan; colorectal cancer; cervical cancer; gastric cancer;
lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
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                                           Gaps
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44.2%; Pred. No. 8.4e+02;
ve 0; Mismatches 3; Indels
       Length 19;
                                         3; Indels
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       Score 14.2; DB 1;
Pred. No. 8.4e+02;
0; Mismatches 3;
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                                                                             388 TCCTCGGATGAGGTGCAGT 406
                                                                                                            1 rccrcrcaggargrecagr 19
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24-MAY-2002; 2002EP-00011710.
          0.8%;
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                                             Conservative
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Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                               Unidentified
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                                                                                                                                                                    RESULT 902
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The present invention describes a method for simultaneously detecting the presence of multiple target nucleic acid molecules in a biological sample comprising: (a) isolating and enriching target nucleic acid molecules from the biological sample; (b) treating the enriched target nucleic acid molecules with Exonuclease I; (c) performing linear PCR on the Exonuclease I treated enriched target nucleic acid molecule to produce influear PCR product where only a single primer is used, (d) obtaining beads coupled to an oligomucleotide molecule complementary to the amplified target nucleic acid molecules; (e) forming a mixture by mixing the beads and the enriched linear PCR product nucleic acid; (f) forming a reacted sample by incubating the mixture under conditions where if the enriched linear PCR product includes the target nucleic acid molecule, the enriched linear PCR product will hybridise to the oligonucleotide (fluorescence of each bead analysed, and (h) detecting a level of fluorescence on the beads, where the level of fluorescence corresponds to a level of a target nucleic acid molecules in a biological sample or for optimising risk-adapted therapy for a disorder associated with the target nucleic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Simultaneously detecting the presence of multiple target nucleic acid molecules in a biological sample for optimizing risk-adapted therapy for a disorder by treating the enriched target nucleic acid molecules with
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                                                                                                                                                            Simultaneous detection, multiple target nucleic acid molecule; biological sample; Exonuclease I; PCR; human papillomavirus; HPV; bactote lymphoblastic leukaemia; cancer; assay; bead array coded detection of multiple target; microarray; targeted genetic risk-stratification; primer; probe; ss.
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Pred. No. 8.4e+02;
0; Mismatches 3; Indels
                                                                                                                           Acute lymphoblastic leukaemia assay related primer #12.
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ACF39450/c
ID ACF39450 standard; DNA; 19 BP.
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05-NOV-2002; 2002US-0423793P.
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                                                                                           (first entry)
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Best Local Similarity 84.2'
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Gaps

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388 TCCTCGGATGAGGTGCAGT 406

84.2%;

16; Conservative

Matches

Local Similarity

rccrcrcaggargracagr 1

19

RESULT 904

ACH03516

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The invention relates to the novel use of irinotecan to treat a patient suffering from cancer. This involves determining if the patient has one or more variant alleles of the UGIAI gene, and if the patient has one or more of such variant alleles, irinotecan is administered in an increased or decreased amount in comparison to the amount that is administered without regard to the patient's alleles in the UGIAIA gene. The invention has cytostatic activity. A composition of the invention acts as a topoisomerase I inhibitor. The method is useful for treating a patient,
                                                                                                                                                                                                                                                                                                      Use of irinotecan to treat cancer patient by determining if patient has variant alleles of UGTIAl gene, administering increased/decreased amounts of irinotecan based on increased/decreased levels of UGTIAl gene product.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    an animal e.g. mouse or a human, preferably African or Asian, suffering
from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,
pancreatic cancer or malignant glioma. The present sequence is udes in
the exemplification of the invention.
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84.2%; Pred. No. 8.4e+02;
tive 0; Mismatches 3; Indels
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                                                                                                                                                                     (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
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                                                           23-JUL-2002; 2002WO-EP008217.
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24-MAY-2002; 2002EP-00011710.
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24-MAY-2002; 2002EP-00011710.
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Best Local Similarity 84.20,
Bring 16; Conservative
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                  20-FEB-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention describes a new composition, which comprises an isolated Liatrophilin (LPH) nucleic acid. The compositions are useful for diagnosing or treating subjects at risk for or having eye disease, e.g. Primary Open-Angle Glaucoma (e.g. juvenile onset or adult onset), ocular hypertension, or elevated intraocular pressure. This sequence represents a primer associated with isolation of human latrophilin 3 (LPH3)
                                                                                                                                                                                                        Human; latrophlin 3; LPH3; ophthalmological; hypotensive; gene therapy; eye disease; primary open-angle glaucoma; ocular hypertension; elevated intraocular pressure; PCR; primer; ss.
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84.2%; Pred. No. 8.4e+02;
ative 0; Mismatches 3; Indels
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                                                                                                                                                                 Human latrophlin 3 (LPH3) associated primer #58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Page 32; 153pp; English
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                                    ACH03516 standard; DNA; 19 BP.
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Best Local Similarity
Matches 16; Conserv
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RESULT 905 ADB88401

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23-JUL-2002; 2002WO-EP008218.
 WPI; 2003-289896/28
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                                                          ADB97384;
                                     Query Match
                                                    RESULT 907
ADB97384/c
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The invention relates to the novel use of irinotecan to treat a patient suffering from cancer. This involves determining if the patient has one or more variant alleles of the UGTIAI gene, and if the patient has one or more of such variant alleles, irinotecan is administered in an increased or decreased amount in comparison to the amount that is administered without regard to the patient's alleles in the UGTIAI gene. The invention has cytostatic activity. A composition of the invention acts as a topoisomerase I inhibitor. The method is useful for treating a patient, an animal e.g. mouse or a human, preferably African or Asian, suffering from cancer such as colorectal, cervical, gastric cancer, lung, ovarian, pancreatic cancer or malignant glioma. The present sequence is udes in
Use of irinotecan to treat cancer patient by determining if patient has variant alleles of UGTIA1 gene, administering increased/decreased amounts of irinotecan based on increased/decreased levels of UGTIA1 gene product.
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0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02; ive 0; Mismatches 3; Indels
                                                                          388 TCCTCGGATGAGGTGCAGT 406
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                                                                                                       1 TCCTCTGAGGATGTGCAGT 19
                                         Conservative
                 Best Local Similarity
Matches 16; Conserv
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Gaps

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Human MDR1 variant allele sequence fragment SEQ ID NO:470.
ADB97384 standard; DNA; 19
                                                                                                                (first entry)
                                                                                                                04-DEC-2003
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irinotecan; colorectal cancer; cervical cancer; gastric cancer; lung cancer; ovarian cancer; pancreatic cancer; malignant glioma; multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;

Homo sapiens

WO2003013537-A2.

23-JUL-2001; 2001EP-00117608. 24-MAY-2002; 2002EP-00011710 (EPID-) EPIDAUROS BIOTECHNOLOGIE AG

Kerb R; Heinrich G,

WPI; 2003-268145/26.

pharmaceutical compositions for with variant allele comprising New use of irinotecan for preparation of treating cancer in subject having genome multidrug resistance 1 polynucleotide.

Claim 1; Page 82; 130pp; English

The invention relates to the novel use of irinotecan or its derivative for the preparation of pharmaceutical compositions for treating

Sequence 19 BP; 3 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

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colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant galoma in a subject having a genome with a variant allele which comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition of the invention has cytostatic activity. The invention is useful for the preparation of pharmaceutical compositions for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject (preferably human, more preferably African or Asian) or a mouse. The present sequence is used in the exemplification of the invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          irinotecan; colorectal cancer; cervical cancer; gastric cancer; lung cancer; ovarian cancer; pancreatic cancer; malignant glioma; multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        pharmaceutical compositions for with variant allele comprising
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84.2%; Pred. No. 8.4e+02;
iive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New use of irinotecan for preparation of treating cancer in subject having genome multidrug resistance 1 polynucleotide.
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24-MAY-2002; 2002EP-00011710.
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nes 16; Conservative
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irinotecan; colorectal cancer; cervical cancer; gastric cancer; lung cancer; ovarian cancer; pancreatic cancer; malignant glioma; multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the preparation of a pharmaceutical composition for treating colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or malignant glioma in a subject having a genome with a variant allele which comprises a multidrug resistance I (MDR1) polynucleotide. A composition of the invention has cytostatic activity. The present sequence is used in the exemplification of the invention.
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44.2%; Pred. No. 8.4e+02;
ve 0; Mismatches 3; Indels
Human MDR1 variant allele sequence fragment SEQ ID NO:469.
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2002EP-00011710.
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Best Local Similarity 84.2%;
Matches 16; Conservative
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24-MAY-2002;
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lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.
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84.2%; Pred. No. 8.4e+02;
tive 0; Mismatches 3; Indels
Length 19;
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                               Indels
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 Score 14.2; DB 1;
                Pred. No. 8.4e+02;
0; Mismatches 3
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                                                               388 TCCTCGGATGAGGTGCAGT 406
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0.8%;
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24-MAY-2002; 2002EP-00011710.
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                                 Conservative
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                Similarity
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                               16;
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                Best Local
Matches 1
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Page 451

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that downregulates expression of a mitogen-activated protein kinase modulating expression of a mitogen-activated protein kinase modulating expression of MAPK genes in cells, tissue explants or organisms by introduction of MAPK genes in cells, tissue explants or organisms by introduction of siNa, (2) kits for in vitro or in vivo delivery of siNa, (3) conjugates and/or complexes of siNa, and (4) cetors that express siNa and cells containing these vectors. MAPK siNas have cytostatic, anorectic, antibabetic, antihiflammatory.

In an interpretation of mark and antibacterial, antihenwatic, antiathermic, antibacterial, antihenwatic, sinas can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity; diabetes types I can into a wide range of tumours, and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel disease). They can also be used for drug screening; diagnosis; target indentification and validation; genetic engineering; pharmacogenomics; indentification and validation; genetic engineering; pharmacogenomics;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents a MAPK sinA which is used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            present invention describes a short interfering nucleic acid (siNA)
                                                                                                                                                                                                                                                                                                                                                                                                        of cancer, downregulates expression of mitogen-activated
                                                                                                                                                                                                                                                                                                                                                                                 New short interfering nucleic acid, useful e.g. for treatment and
                                                                                                                                                                                                                                                                                     Chowrira B;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 3; SEQ ID NO 368; 164pp; English.
                                                              11-MAR-2002; 2002US-0363124P.
06-JUN-2002; 2002US-0363124P.
29-AUG-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-040929P.
15-JAN-2003; 2003US-0440129P.
                                                                                                                                                                                                                                         (SIRN-) SIRNA THERAPEUTICS INC.
28-JAN-2003; 2003WO-US002510
                                                                                                                                                                                                                                                                                                                                                                                                                                   protein kinase genes.
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                                                                                                                                                                                                                                                                                        Mcswiggen J,
                                               20-FEB-2002;
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                             0.8%; Score 14.2; DB 1; Length 19; 57.9%; Pred. No. 8.4e+02; tive 5; Mismatches 3; Indels
Sequence 19 BP; 2 A; 4 C; 7 G; 0 T; 6 U; 0 Other;
                                                                  11; Conservative
                                                  Similarity
                                   Query Match
                                                    Local
                                                                  Matches
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Mitogen activated protein kinase sina oligonucleotide SEQ ID NO:473.
1156 ATGTGGGGTGTGGGCTGCA 1174
                                                                                          1 AUCUGGUCUGUGGGCUGCA 19
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ADE29851/C
ID ADE298
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DT 29-JAN
DE Mitoge
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KW short
KW mitoge

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short interfering nucleic acid; siNA; downregulation; inhibition; mutogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic; annosuppressive; antidacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; rheumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss.
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Synthetic

have cytostatic anorectic, antidiabetic, antiinflammatory, antiasthmatic, immunosuppressive, antidiabetic, antiinflammatory, antiasthmatic, immunosuppressive, antidabetic, antiorheumatic, santiasthmatic, antigoriatic and gastrointestinal activities. The MAPK sinks can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity; diabetes types I septic shock, rheumatoid arthritis, psoriasis and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel disease). They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; solvying spene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents a MAPK siNA which is used in the exemplification of the present invention. that downregulates expression of a mitogen-activated protein kinase (MAPK) genes by RNA interference. Also described: (1) a method for modulating expression of MAPK genes in cells, tissue explants or organisms by introduction of siNA; (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA, and (4) vectors that express siNA and cells containing these vectors. MAPK siNAs The present invention describes a short interfering nucleic acid (siNA) short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorecitic; antidibbetic; antidiflammatory; antiasthmatic; immunosuppressive; antibacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; Gaps Mitogen activated protein kinase sinA oligonucleotide SEQ ID NO:463. New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated ; 0 Chowrira Score 14.2; DB 1; Length 19; Pred. No. 8.4e+02; 0; Mismatches 3; Indels Haeberli P, Sequence 19 BP; 6 A; 7 C; 4 G; 0 T; 2 U; 0 Other; Example 3; SEQ ID NO 473; 164pp; English. Usman N, 1156 ATGTGGGGTGTGGCTGCA 1174 11-MAR-2002; 2002US-0363124P. 06-JUN-2002; 2002US-0386782P. 29-AUG-2002; 2002US-0406784P. 05-SEP-2002; 2002US-0408378P. 09-SEP-2003; 2002US-0409293P. 15-JAN-2003; 2003US-0440129P. 19 Arcregrereresecreca 1 (SIRN-) SIRNA THERAPEUTICS INC ADE29841/c ID ADE29841 standard; RNA; 19 BP. 0.8%; 28-JAN-2003; 2003WO-US002510. Mcswiggen J, Beigelman L, 29-JAN-2004 (first entry) Local Similaricy nes 16; Conservative protein kinase genes. WPI; 2003-689980/65. 04-SEP-2003. diagnosis ADE29841; Query Match RESULT 913 Matches à 셤 

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Local Similarity
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11-MAR-2002;
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05-SEP-2002;
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15-JAN-2003;
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                                                                                                                                                                                                                                                                                                            New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated
inflammatory disease; asthma; septic shock; rheumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss.
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                                                                                                                                                                                                                                                               Mcswiggen J, Beigelman L, Usman N, Haeberli P,
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2002US-0408378P.
2002US-0409293P.
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2002US-0386782P.
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Best Local Similarity 84.2%;
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                     protein kinase genes.
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                                                                       WO2003072590-A1.
                                                                                                                                                                            29-AUG-2002;
05-SEP-2002;
09-SEP-2002;
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                                                 Synthetic
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the present interiors a short interior in the present through the present interiors a short that downrequiates expression of a mitogen activated protein kinase (MAPK) genes by RNA interference. Also described: (1) a method for modulating expression of MAPK genes in cells, tissue explants or organisms by introduction of MAPK genes in cells, tissue explants or organisms by introduction of SiNA; (2) Kits for in vitro or in vivo delivery of SiNA; (3) conjugates and/or complexes of SiNA; and (4) vectors that express siNA and cells containing these vectors. MAPK siNAs have cytostatic, ancient antiabacterial, antirheumatic, antiathritic, antisoriatic antiabacterial, antirheumatic, antisoriatic and gastrointestinal activities. The MAPK siNAs can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity; diabetes types I and II; a wide range of tumours, and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel disease). They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents a MAPK siNA which is used
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short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic; immunosuppressive; antibacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; heumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss.
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Pred. No. 8.4e+02;
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2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
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2003US-0440129P.
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short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein Kinase; MAP Kinase; MAPK; RNA interference; cytostatic; anorectic; antidiabetic; antiinflammatory; antiasthmatic; immunosuppressive; antibacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; rheumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening; parthritis; genetic engineering; pharmacogenomic; gene mapping; ss.

WO2003072590-A1.

Synthetic.

04-SEP-2003.

Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:462.

(first entry)

29-JAN-2004

ADE29840;

ADE29840 standard; RNA; 19 BP.

ADE29840,

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29-JAN-2004 (first entry)
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The present invention describes a short interfering nucleic acid (siNA) that downregulates expression of a mitogen-activated protein kinase that downregulates expression of a mitogen-activated protein kinase (NAPK) genes by RNA interference. Also described: (1) a method for modulating expression of MAPK genes in cells, tissue explants or coganisms by introduction of siNA; (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA; and (4) vectors that express siNA and cells containing these vectors. MAPK siNAs vectors that express in antiabletic, antiinflammatory, antiinflammatory, antiasthmatic, immunosuppressive, antibacterial, antirheumatic, antisporiatic and gastrointestinal activities. The MAPK siNAs can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity; diabetes types I can II; a wide range of tumours, and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriais and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriais and inflammatory bowel disease). They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents a MAPK sinA which is used in the exemplification of the present invention. short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorectic; antidabetic; antiinflammatory; antiasthmatic; immunosuppressive; antibacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; rheumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss. Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:357. New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated protein kinase genes. Chowrira Usman N, Haeberli P, Sequence 19 BP; 5 A; 6 C; 4 G; 0 T; 4 U; 0 Other; Example 3; SEQ ID NO 357; 164pp; English. (SIRN-) SIRNA THERAPEUTICS INC. 2002US-0363124P. 2002US-0386782P. 2002US-0406784P. 2002US-0408378P. 28-JAN-2003; 2003WO-US002510. 15-JAN-2003; 2003US-0440129P. Beigelman L, WPI; 2003-689980/65. WO2003072590-A1. Mcswiggen J, 09-SEP-2002; 06-JUN-2002; 29-AUG-2002; 05-SEP-2002; 20-FEB-2002; 11-MAR-2002; 04-SEP-2003 Synthetic.

84.28; Query Match ö Gaps .; 0 0.8%; Score 14.2; DB 1; Length 19; 88.4%; Pred. No. 8.4e+02; ve 3; Mismatches 3; Indels 967 GTGCTACACCGAGACCTCA 985 1 GUGCUCCACCGAGAUCUAA 19 68.48; Query Match
Best Local Similarity 68.4
Matches 13; Conservative

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The present invention of a mitogen-activated protein kinase (MAPK) genes by RNA interference. Also described: (1) a method for modulating expression of MAPK genes in cells, tissue explants or coganisms by introduction of SiNA; (2) kits for in vitro or in vivo delivery of SiNA; (3) conjugates and/or complexes of SiNA; and (4) vectors that express siNA and cells containing these vectors. MAPK SINAs there expression; antidiabetic, antifinamatory, antidiabetic, antitiabetic, antitiabetic, antitiabetic, antitiated and gastrointestinal activities. The MAPK can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity, diabetes types I and II; a wide range of tumours, and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel disease). They can also be used for drug screening; diagnosis; target identification and yalidation; genetic engineering; diagnosis; target cludying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence repersents a MAPK siNA which is used
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%; Score 14.2; DB 1; Length 19; 34.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Haeberli P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 4 A; 4 C; 6 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            polymorphisms). The present sequence represents in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 3; SEQ ID NO 462; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen J, Beigelman L, Usman N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SIRN-) SIRNA THERAPEUTICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                          2002US-0363124P.
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2002US-0406784P.
2002US-0408378P.
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Matches 16; Conservative
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29-AUG-2002;
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11-MAR-2002;
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New
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                                                                                                                                                                                                                                                                                                                                                                                                                                                short interfering nucleic acid; sinA, downregulation; vascular endothelial growth factor receptor; VEGPR, antiangiogenic; cytostatic; antidiabetic; ophthalmological; antiarthritic; antidiabetic; ophthalmological; antiarthritic; antidiabetic; diabetic retinopath; macular degenesis-associated condition; cancer; arthritis; psoriasis; endometriosis; angiofibroma; polycystic kidney disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                double-stranded interfering nucleic acid, useful e.g. for treatment diagnosis of cancer, downregulates the vascular endothelial growth
                                                                                                                                                                                                                                                                                                                                                                           Human VEGFR3 short interfering nucleic acid (siNA) SEQ ID NO:1680.
                                                                                                                                                                                                                                                                                                                                                                                                                                    double-stranded short interfering nucleic acid;
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GIGCIACACCGAGACCICA 985
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                              GIGCTCCACCGAGATCTAA 1
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2002US-0408378P.
2002US-0409293P.
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2002US-0386782P.
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2002US-0399348P.
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                                                                                                                                                                                                ADF37391 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen J, Beigelman L,
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03-JUL-2002;
29-JUL-2002;
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05-SEP-2002;
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11-MAR-2002;
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196
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                                                                                                                                          RESULT 917
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes a double-stranded short interfering mucleic acid (siNA) that downregulates expression of the vascular endothelial growth factor receptor (VEGFR) gene. Also described: (1) a siNA, that downregulates the VEGF gene; (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA; (4) vectors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    double-stranded interfering nucleic acid, useful e.g. for treatment diagnosis of cancer, downregulates the vascular endothelial growth
    (e.g. c
                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                Human VEGFR1 short interfering nucleic acid (siNA) SEQ ID NO:615.
    mapping
is used
                                                                                                                       o,
                                                                                          Length 19;
                                                                                       Score 14.2; DB 1; Length 1
Pred. No. 8.4e+02;
4; Mismatches 3; Indels
engineering, studying gene function, and also for gene single-nucleotide polymorphisms). The present sequence exemplification of the present invention.
                                                            6 G; 0 T; 5 U; 0 Other;
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2002WO-US017674.
2002US-0386782P.
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2002US-00287949.
                                                                                          0.8%;
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                                                                                                      63.2%;
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                                                                                                                                                                                                                                                         ADF36326 standard; RNA; 19
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                                                                                                                                                                                                                                                                                                                  (first entry)
                                                            2 A; 6 C;
                                                                                                        12; Conservative
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                                                            Sequence 19 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003070910-A2
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29-MAY-2002;
06-JUN-2002;
03-JUL-2002;
29-JUL-2002;
29-AUG-2002;
05-SEP-2002;
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04-NOV-2002;
27-NOV-2002;
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                                                                                        Query Match
Best Local 8
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                                                                                                                    Matches
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that express siNa, and (5) single-stranded siNa with similar properties. The siRas have antianglogenic, cytostatic, antidiabetic, ophthalmological, antiatrhritic, antipostratic, meghrotropic and gynaecological activities. The siNa are useful for modulating (downregulating) the expression of VEGFR genes. The siNa are potentially useful for treating a wide range of anglogenesis-associated conditions, particularly cancers, diabetic retinopathy, macular degeneration, necovascular glaucoma, arthritis, psoriasis, endometriosis, angiofibroma, and polycystic kidney disease. The siNa may also be useful for diagnosis, drug screening, target identification and validation, genetic engineering, studying gene function, and also for gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New double-stranded interfering nucleic acid, useful e.g. for treatment
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                                                                                                                                                                                                                                                                                         0.8%; Score 14.2; DB 1; Length 19;
84.2%; Pred. No. 8.48+02;
.ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                         Sequence 19 BP; 6 A; 7 C; 5 G; 0 T; 1 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                  1033 GACTTTGGCCTGGCCCGAG 1051
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29-AUG-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-0409293P.
04-NOV-2002; 2002US-00287949.
27-NOV-2002; 2002US-0306747.
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06-JUN-2002; 2002US-0386782P.
03-JUL-2002; 2002US-0393796P.
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tes 16; Conserv
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nucleic acid (siMa) that downregulates expression of the vascular nucleic acid (siMa) that downregulates expression of the vascular endothelial growth factor receptor (VEGFR) gene. Also described: (1) a siMA that downregulates the VEGF gene; (2) Kits for in vitro or in 
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and diagnosis of cancer, downregulates the vascular endothelial growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                           invention describes a double-stranded short interfering
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 19 BP; 5 A; 6 C; 6 G; 0 T; 2 U; 0 Other;
                                                                           Example 3; SEQ ID NO 1927; 207pp; English.
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2002US-0408378P.
2002US-0409293P.
2002US-00287949.
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                             factor receptor gene
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05-SEP-2002;
09-SEP-2002;
04-NOV-2002;
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                                                                                                                                 The present
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 920
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Ruben SM;

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New isolated keratinocyte derived interferon (KDI) polypeptide, useful for preventing, treating or ameliorating a medical condition, such as an immune-related disorder, a viral infection, a viral exposure or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mcswiggen J, Beigelman L, Chowrira B;
                 Lafleur DW, Moore PA,
                                               WPI; 2003-381702/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADF84085
    a
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                                                                                                                                                                                                                                               nucleic acid (sink) that downregulates expression of the vascular endothelial growth factor receptor (WGFR) gene. Also described: (1) a sink that downregulates the VEGF gene; (2) kits for in vitro or in vivo delivery of sink, (3) conjugates and/or complexes of sink, (4) vectors that downregulates sink, and (5) single-stranded sink with similar properties. The sinks have antianglogenic, cytostatic, antidiabetic, ophthalmological, antiatrhritic, antipsoriatic, nephrotropic and gynaecological activities. The sink are useful for modulating (downregulating) the expression of VEGFR genes. The sink are potentially useful for treating a wide range of angiogenesis-associated conditions, particularly cancers, diabetic retinopathy, macular degeneration, and polycystic kidney disease. The sink may also be useful for diagnosis, and polycystic kidney disease. The sink may also be useful for diagnosis, and polycystic kidney disease. The sink may also be useful for diagnosis, and polycystic kidney disease. The sink may also be useful for diagnosis, and polycystic kidney disease. The sink may also be useful for diagnosis, and polycystic kidney disease. The sink may also be useful for diagnosis, and polycystic kidney disease. The sink may also for gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence is used in the exemplification of the present invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human keratinocyte derived interferon; human KDI; agonist; antagonist; inding partner identification; immune-related disorder; cancer; viral infection; viral exposure; immunomdulator; virucide; cytostatic; gene therapy; interferon alpha 2; expression analysis; quantitative PCR;
                                                                                                                                         New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates the vascular endothelial growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                      present invention describes a double-stranded short interfering
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human interferon alpha 2 quantitative PCR primer, SEQ ID:51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.2; DB 1; Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19 BP; 1 A; 5 C; 7 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4; Mismatches
                                                                                                                                                                                                     Example 3; SEQ ID NO 188; 207pp; English.
                                                                              Mcswiggen J, Beigelman L, Pavco P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1033 GACTTTGGCCTGGCCCGAG 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  || :::||||: ||||| |
GAUTUTGGCCTUGCCCGGG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADF95015 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-JUL-2001; 2001US-0090B594.
06-DEC-2001; 2001US-0336165P.
27-NOV-2002; 2002US-00306747.
15-JAN-2003; 2003US-0440129P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-JUL-2002; 2002WO-US023214
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      63.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                               (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                           factor receptor gene.
                                                                                                          WPI; 2003-679876/64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003031566-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-FEB-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADF95015;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 921
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                                                  The invention relates to human keratinocyte derived interferon (KDI; ADF94966) and nucleic acids encoding it (ADF94965). The KDI gene is located on chromosome 9222. The invention also relates to sequences at least 70% identical to the KDI nucleic acid and protein sequences; a polypeptide comprising an epitope-bearing portion of KDI; recombinant vectors and host cells comprising a KDI nucleic acid sequence; a method for the recombinant expression of KDI nucleic acid sequence; a method for the recombinant expression of KDI nucleic acids or proteins for treating medical conditions; a wethod for the diagnosis of a pathological condition or susceptibility to a pathological condition, and methods of screening for KDI binding partners. The KDI polypeptides and polynucleotides, and methods of the invention are useful for preventing, treating or ameliorating a medical condition, such as an immune-related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                disorder, cancer, or a viral infection or viral exposure. The present sequence is related to the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; BCR; ss; siRNA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.2; DB 1; Length 19; 14.2%; Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 6 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
Example 5; SEQ ID NO 51; 398pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   926 TCCAGCTGCTCCGTGGCCT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        || ||||||||||| |||| ||| TCAAGCTGCTCTGTGTGGGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADF84085 standard; RNA; 19 BP.
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2002US-0408378P.
2002US-0409293P.
2003US-0439922P.
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2002US-0386782P.
2002US-0404039P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 84.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003070972-A2.
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06-JUN-2002;
15-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-AUG-2002;
05-SEP-2002;
09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
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New double-stranded interfering nucleic acid, useful e.g. for treatme and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
                                                                                                                                                                                                                                                                                                                                                                                                                              short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; BCR; ss; siRNA.
                                                                                           The invention relates to a novel double-stranded short interfering
                                                                                                                                                                                                                                                                                                                                                                                                           Human breakpoint cluster region-targeted siRNA - SEQ ID 494.
                                                                                                                                                                                                    Sequence 19 BP; 3 A; 3 C; 11 G; 0 T; 2 U; 0 Other;
                                                                       Example 7; SEQ ID NO 379; 197pp; English.
                                                                                                                                                                                                                                                                    228 GAGTGGTGGTGGCGGC 246
                                                                                                                                                                                                                                                                                        GAGAGGUGGUGGCAGCGGC 19
                                                                                                                                                                                                                          0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002US-0363124P.
2002US-0386782P.
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2002US-0406784P.
2002US-0408378P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                            ADF84200 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                      26-FEB-2004 (first entry)
                                                                                                                                                                                                                      Query Match
Best Local Similarity 73.73
Matches 14; Conservative
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          WPI; 2003-679889/64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003070972-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-AUG-2002;
29-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-MAR-2002;
06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-SEP-2002;
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Example 7; SEQ ID NO 494; 197pp; English

Chowrira

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The invention relates to a novel double-stranded short interfering nucleic acid (sNNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel double-stranded short interfering nucleic acid (siNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRAh of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint
                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
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                                                                                                                                                                                                                                                                 Score 14.2; DB 1; Length 19;
Pred. No. 8.4e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                            Sequence 19 BP; 2 A; 3 C; 9 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                  the human BCR-targeted siRNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 7; SEQ ID NO 610; 197pp; English.
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                                                                                                                                                                                                                                                                                                                                                        673 AGCAAGCTCACAGACAACC 691
                                                                                                                                                                                                                                                                                                                                                                                             19 AGCAAGCTCCCTGCCAACC 1
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2002US-0406784P.
2002US-0408378P.
2002US-0409293P.
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2002US-0386782P.
                                                                                                                                                                                                                                                                   0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADF84316 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                     Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
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29-AUG-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 924
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                                                                                                                                                                                                  nucleic acid (siNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates expression activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of the human BCR-targeted siRNA of the invention.
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                                                             treatment
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Pred. No. 8.4e+02;
2; Mismatches 3; Indels
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452 CCACTGAGGACATCAACAA 470
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   The current sequence is that of
                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                            short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
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                                                                                 0.8%; Score 14.2; DB 1; Length 19; 52.6%; Pred. No. 8.4e+02;
                                                                                                                    Indels
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                                                 Sequence 19 BP; 3 A; 3 C; 6 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the human ABL1-targeted siRNA of the invention.
gene function studies and gene mapping. The cur
the human ABL1-targeted siRNA of the invention
                                                                                                                    6; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                 Human ABL1-targeted siRNA - SEQ ID 732.
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                                                                                                                                                  1025 AGCTGGCTGACTTTGGCCT 1043
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AGGUAGCUGAUUUUGGCCU 19
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2002US-0386782P,
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2002US-0406784P.
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2002US-0409293P.
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                                                                                                                                                                                                                                                                 ADF84438 standard; RNA; 19
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                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                         Query Match
Best Local Similarity 52.69
Marches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-679889/64.
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Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003070972-A2.
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29-AUG-2002;
05-SEP-2002;
09-SEP-2002;
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06-JUN-2002;
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                                                                                                                                                                                                                               RESULT 925
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The invention relates to a novel double-stranded short interfering nucleic acid (siNA) that downregulates expression of the breakpoint cluster region—vabl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of the human ABL1-targeted siRNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    double-stranded interfering nucleic acid, useful e.g. for treatment diagnosis of leukemia and lymphoma, downregulates the breakpoint
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                                                                                                                                                                                                                                                                                                                                                                                                                                            short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; ss; siRNA; ABL1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                               Human ABL1-targeted siRNA - SEQ ID 1051.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mcswiggen J, Beigelman L, Chowrira B;
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cluster region-Abelson (BCR-ABL) gene.
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CCACUCAGGACUUCAGCAA 19
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                                                                                                                                                                                    ADF84757 standard; RNA; 19 BP.
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2002US-0386782P.
2002US-0404039P.
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05-SEP-2002; 2002US-0408378P
09-SEP-2002; 2002US-0409293P.
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14-JAN-2003; 2003US-0439922P
15-JAN-2003; 2003US-0440129P
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Best Local Similarity
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06-JUN-2002;
15-AUG-2002;
29-AUG-2002;
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ADF83937
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WPI; 2003-679889/64.
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06-JUN-2002;
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                                                Homo sapiens
                                                                                                                                                   20-FEB-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
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                                                                                             short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; BCR; ss; siRNA.
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                                                                         Human breakpoint cluster region-targeted siRNA - SEQ ID 231.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19 BP; 5 A; 9 C; 3 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 14.2; DB 1;
Pred. No. 8.4e+02;
1; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 7; SEQ ID NO 231; 197pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human ABL1-targeted siRNA - SEQ ID 929.
                                                                                                                                                                                                                                                                                                                                                                                                               Chowrira B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   673 AGCAAGCTCACAGACAACC 691
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2002US-0363124P.
2002US-0364032P.
2002US-0406784P.
2002US-0406378P.
2002US-0408378P.
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BP
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ADF83937 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC
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                                                  (first entry)
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                                                                                                                                                                                                                                20-FEB-2003;
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                         ADF83937
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ID ADF8465
XX AC ADF846
XX DT 26-FEB
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Matches

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The invention relates to a novel double-stranded short interfering nucleic acid (siNA) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siNNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, gene function studies and gene mapping. The current sequence is that of the human ABL1-targeted siNNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
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short interfering nucleic acid; siNA; breakpoint cluster region; v-abl Abelson murine leukaemia viral oncogene homologue 1; BCR-ABL; cytostatic; leukaemia; lymphoma; human; 85; siRNA; ABLi.
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ID ADF83822 standard; RNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-AUG-2002; 2002US-0404039P.
29-AUG-2002; 2002US-04067B4P.
0S-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-0409378P.
14-JAN-2003; 2003US-0439922P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2002US-0363124P.
2002US-0386782P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16; Conservative
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The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human platelet-derived growth factor receptor (POGFY) gene by RNA interference. The siNAs may or may not comprise ribonuclectides and may downled stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonuclectide and an antisense oligonuclectide. Specifically, the siNAs include short interfering RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA, double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA). The siNAs can be chemically synthesised, expressed from a cvector or enzymatically synthesised. The invention also relates to kits complexes of siRNA; and vectors that express siNA. The siNAs are used to modulate expression of the POGFY gene in cells, tissue explants or complexement of a variety of conditions. They may be used for treating leukaemia and solid tumours, restenosis, polycystic kidney disease, bronchiolitis, glomerulomephritis and stroke. The siNAs are also and indiction and solid tumours, therapeutic target identification and solid tumours, therapeutic target identification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           targeted double-stranded siNA, which is identical to the PDGFr transcript
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cytostatic; vasotropic; nephrotropic; cerebroprotective; treating leukaemia; solid tumors; restenosis; polycystic kidney disease; bronchiolitis; glomerulonephritis; stroke; RNA interference; short interfering mucleic acid; sink, short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the lower strand of a human PDGFr-
                                                                                                                                                                                                                                                                                                                                                                                              New short interfering nucleic acid, useful e.g. for treatment and diagnosis of tumors, downregulates expression of the platelet-derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 14.2; DB 1; Length 19; Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PDGFr-targeted siNA upper strand SEQ ID NO:285.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seguence 19 BP; 2 A; 8 C; 2 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3; SEQ ID NO 596; 148pp; English.
                                                                                                                                                                                                                                                                                                  Beigelman L, Chowrira B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1109 CCCCTGACATCCTGCTTGG 1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ccucucacauccuucuugg 19
                                                                       2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
2002US-0409293P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
     05-FEB-2003; 2003WO-US003473.
                                                                                                                       29-AUG-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-0408378P.
15-JAN-2003; 2003US-0440129P.
                                                     2002US-0358580P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 growth factor receptor gene.
                                                                                                                                                                                                                                                  (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADO14854 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11; Conservative
                                                                                                                                                                                                                                                                                                                                                WPI; 2003-731605/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     target sequence.
                                                                                                                                                                                                                                                                                                  Mcswiggen J,
                                                   20-FEB-2002;
                                                                          11-MAR-2002;
06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADO14854;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADO14854/
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a novel double-stranded short interfering mucleic acid (siMa) that downregulates expression of the breakpoint cluster region-v-abl Abelson murine leukaemia viral oncogene homologue 1 (BCR-ABL) gene. The siRNA of the invention demonstrates cytostatic activity and may be useful for modulating expression of the BCR-ABL gene, as well as for treating leukaemia or lymphoma and in diagnosis, drug screening, target identification and validation, genetic engineering, the function studies and gene mapping. The current sequence is that of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  treating leukaemia; solid tumors; restenosis; polycystic kidney disease; bronchiolitis; glomerulonephritis; stroke; RNA interference; short interfering nucleic acid; siNA; short interfering RNA; siRNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New double-stranded interfering nucleic acid, useful e.g. for treatment and diagnosis of leukemia and lymphoma, downregulates the breakpoint cluster region-Abelson (BCR-ABL) gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       double-stranded RNA, micro-RNA, miRNA, short hairpin RNA, shRNA, expression modulation; gene therapy, drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; human; platelet derived growth factor receptor; PDGFr; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%; Score 14.2; DB 1; Length 19; 34.2%; Pred. No. 8.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cytostatic; vasotropic; nephrotropic; cerebroprotective;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human PDGFr-targeted siNA lower strand SEQ ID NO:596.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 19 BP; 2 A; 11 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         the human BCR-targeted siRNA of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 7; SEQ ID NO 116; 197pp; English.
                                                                                                                                                                                                                                                                                                                                                                                              Chowrira B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     228 GAGTGGTGGTGGTGGCGGC 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -
0
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                                                                                                                                                                                            2002US-0406784P.
2002US-0408378P.
2002US-0409293P.
2003US-0439922P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADO15165 standard; RNA; 19 BP
                                             20-FEB-2003; 2003WO-US005234.
                                                                                                2002US-0358580P
                                                                                                                  2002US-0363124P.
2002US-0386782P.
                                                                                                                                                                   2002US-0404039P
                                                                                                                                                                                                                                                                                                2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              84.2%;
                                                                                                                                                                                                                                                                                                                                                                                              Beigelman L,
                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-679889/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003072704-A2
                                                                                                                                                                                          29-AUG-2002;
05-SEP-2002;
09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen J,
                                                                                                                                                                                                                                                                      14-JAN-2003;
                                                                                                                                                                                                                                                                                                15-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens,
                                                                                              20-FEB-2002;
                                                                                                                                              06-JUN-2002;
                                                                                                                  11-MAR-2002;
                                                                                                                                                                   15-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUL-2004
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28-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AD015165;
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RESULT 930

qq

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Matches

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Gaps .

Homo sapiens

06-JUN-2002; 29-AUG-2002; 05-SEP-2002;

09-SEP-2002;

20-FEB-2002; 11-MAR-2002;

04-SEP-2003

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BP
                                   ADI26828/c
ID ADI26828 standard; DNA; 19
XX
19
                           RESULT 932
g
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16;

Matches

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Query Match

22-APR-2004

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The invention describes a new antisense oligonucleotide, having a sequence comprising 8-80 bp targeted to a nucleic acid encoding cyclindependent kinase 4, specifically hybridises with the nucleic acid encoding cyclin-dependent kinase 4 and inhibits expression of cyclindependent kinase 4. The antisense oligonucleotide is useful for preparing a composition for treating diabetees, infertility or hyperproliferative disorder, e.g., cancer. This sequence represents a primer used in the isolation of DNA encoding mouse cyclin dependent kinase 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              analytical chip; bacterial 16S-rRNA; genotypic characterization; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense oligonucleotide, having a sequence targeted to a nucleic acid encoding cyclin-dependent kinase 4, useful for preparing a composition for treating diabetes, infertility or hyperproliferative
                                                                                                                                                                                 cyclin-dependent kinase 4, diabetes, infertility, hyperproliferative disorder; cancer; antisense technology; mouse; PCR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.2; DB 1; Length 19; 44.2%; Pred. No. 8.4e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                            cytostatic; antidiabetic; antiinfertility; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19 BP; 5 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                        Mouse cyclin dependent kinase 4 primer seq id
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Analytical probe chip of the invention #56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 13; SEQ ID NO 13; 90pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1153 GACATGTGGGGTGTGGGCT 1171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dobie KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19 GACATGTGGAGCGTTGGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADO18297 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-JUL-2002; 2002US-00188779.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-JUL-2002; 2002US-00188779.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ilarity 84.2%;
Conservative
                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         disorder, e.g., cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dean NM, Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-081710/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
nes 16; Conserv
                                                                                                                                                                                                                                                                                                                                             US2004005567-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2004033720-A2.
                                                                                                                                                                                                                                                                                             Mus musculus.
                                                        22-APR-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                              08-JAN-2004
                                                                                                                                                                                                                                          primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
        ADI26828;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AD018297
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the sinks include short interferring RNA (siRNA, doublestranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA). The siNAs can be unmodified or chemically modified, can contain can be unmodified or chemically modified, can contain contain corrections and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siRNA; conjugates and/or complexes of siRNA; and vectors that express siNA. The siNAs are used to modulate expression of the PDGFr gene in cells, tissue explants or cranically expression of the PDGFr gene in cells, tissue explants or cranically expression of the poffr gene in cells, tissue explants or cranically expression of the poffr gene in cells, tissue explants or cranically eleukaemia and solid tumours, restenosis, polycystic kidney disease, bronchiolitis, glomerulomephritis and stroke. The siNAs are also and instant of a variety of complexed the sinks are also the unset in solid time sinks, therapeutic target identification and side in a variety of size of the sinks are also and wall states.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and validation, genetic engineering, pharmacogenomics, studying gene function, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the upper strand of a human PDGFr-targeted double-stranded siNA, which is identical to the PDGFr transcript
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New short interfering nucleic acid, useful e.g. for treatment and diagnosis of tumors, downregulates expression of the platelet-derived growth factor receptor gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to short interfering nucleic acids (siNA) which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  downregulate expression of the human platelet-derived growth factor receptor (PDGFr) gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They
expression modulation; gene therapy; drug screening; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
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84.2%; Pred. No. 8.4e+02;
ative 0; Mismatches 3; Indels
                          therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; human; platelet derived growth factor receptor; PDGFr; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 3; SEQ ID NO 285; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chowrira B;
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2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIBO-) RIBOZYME PHARM INC
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                                                                                                                                                                                                                                                                     The present invention relates to an analytical chip for simultaneous determination of one or more different bacterial 16S-rRNA in liquid determination of one or more bacterial 16S-rRNA, cample. The chip is useful for detecting one or more bacterial 16S-rRNA, derived from bacteria such as Achromobacter xylosoxidans, Acinecobacter baumannii, Actinomyces israelii, Aerococcus viridans, Aeromonas con ydrophilia, Agrobacterium radiobacter, Bacillus sp., Bacteroides covatus, Campylobacter fetus, Citrobacter freundii, Enterococcus avium covatus, Campylobacter fetus, Citrobacter freundii, Enterococcus avium covatus, Campylobacter fetus, Citrobacter freundii, Flavobacterium breve, CC Fusobacterium nucleatum, Gemenla motolilorum breve, Lactobacillus acidophilus influenzae, Hafnia alviei, Kingella sp., Klebsiella oxytoca catarrhalis, Mycobacterium avium, Neisseria cinerea, Nocaacia sp., Cohrobactrum anthropi, Pasteurella multocida, Peptostreptococcus magnus colinically relevant bacteria. The chip is useful for detecting clinically relevant bacteria. The chip is useful for detecting clinically accurate, easy and reliable identification of bacteria by contrait, and reliable identification of bacteria by contrait, and reliable identification of bacteria by contrait and reliable identification of bacteria by contrait, and reliable identification of bacteria by
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    analytical chip; bacterial 16S-rRNA; genotypic characterization; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          genotypic characterization in a provided sample and also enables identification of a bacterium even in a complex biological sample. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                   Analytical chip useful for simultaneous determination of one or more different bacterial 16S-rRNA in liquid sample, comprising evanescent field measurement platform as solid carrier and several specific
                                                                                         Utinger D;
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                                                                                          Jacquet JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seguence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Analytical probe chip of the invention #15.
                                                                                         Charbonnier Y,
                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 56; 82pp; English.
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                                                                                 Francois P, Charr
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24-SEP-2003; 2003WO-EP010626.
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                             09-OCT-2002; 2002EP-00022631
                                                            (UYGE-) UNIV GENEVE HOPITAUX
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                                                                                                                                        WPI; 2004-375537/35
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les 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2004033720-A2.
                                                                                         Schrenzel J,
Kresbach GM,
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Matches
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The present invention relates to an analytical chip for simultaneous determination of one or more different bacterial 166-rRNA in liquid sample. The chip is useful for detecting one or more bacterial 165-rRNA, derived from bacteria such as Achtomobacter xylosoxidans, Actinetobacter baumannii, Actinomyces israelii, Aerococcus viridans, Aeromonas hydrophilia, Agribacterium adiobacter, Bacillus sp., Bacteroides ovatus, Campylobacter fetus, Citrobacter freundii, Enterococcus avium, Eubacterium nucleatum, Gemella morbillorum, Gardnerella vaginalis, Hademophilus influenzae, Hafnia alvei, Kingella sp., Klebsiella oxytoca Lactobactum anthropi, Pasteurella multocida, Poetostreptococcus magnus catarrhalis, Mycobacterium avium, Neisseria cinerea, Noraxella catarrhalis, Mycobacterium avium, Neisserial in Noraxella cohrobactum anthropi, Pasteurella multocida, Peptostreptococcus magnus ochrobactum anthropi, Shigella sonnei, Veillonella parvula, Veillonella pp. or Yersinia enterocolitica. The chip is useful for detecting clinically relevant bacteria. The chip enables determination of one or more different bacteria. The chip enables determination of one cannels rapid, accurate, easy and reliable identification of bacteria by genotypic characterization in a provided sample and also enables contained the chip is according the contained the co
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                                                                                                                                                                                     Utinger D;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 15; 82pp; English
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                                                                                                                                                                                          P, Chark
Ehrat M;
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09-OCT-2002; 2002EP-00022631.
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                                                                                          (UYGE-) UNIV GENEVE HOPITAUX
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nes 16; Conservative
                                                                                                                                                                                               Francois
                                                                                                                                                                                                                                        Abel A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          recognition elements.
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                                                                                                                                                                                     Schrenzel J,
Kresbach GM,
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Utinger D;

Charbonnier Y, Jacquet JG,

Francois P, Charl Abel A, Ehrat M;

(UYGE-) UNIV GENEVE HOPITAUX

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analytical chip; bacterial 168-rRNA; genotypic characterization; probe;
                                                                                                                                                                        Analytical probe chip of the invention #530.
                                                                                                                                                                  15-JUL-2004 (first entry)
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           Schrenzel J,
Kresbach GM,
                                                                                                                                                                                       Synthetic
                                                                                                                                                             AD018771;
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The present invention relates to an analytical chip for simultaneous determination of one or more different bacterial 165-FRNA in liquid sample. The chip is useful for detecting one or more bacterial 165-FRNA, derived from bacteria such as Achromobacter xylosoxidans, Acromeobacter baumanni, Actinomyces israelii, Aerococcus viridans, Aeromonas hydrophilia, Agrobacterium radiobacter, Bacillus sp., Bacteroides hydrophilia, Agrobacterium radiobacter, Bacillus sp., Bacteroides covatus, Campy/bacter fetus, Citrobacter freundii, Enterococcus avium c. Eubacterium lentum, Escherichia coli, Flavobacterium breve. C. Haemophilus influenzae, Hafnia alvei, Kingella sp., Klebsiella oxytoca catarrhalis, Mycobacterium avium, Neisseria cinerea, Nocardia sp., Cohrobactum anthropi, Pasteurella multocida, Peptostreptococcus magnus catarrhalis, Mycobacterium avium, Veilsonella protococus magnus cohrobactum anthropi, Pasteurella multocida, Peptostreptococcus magnus con Yersinia enterocolitica. The chip is useful for detecting clinically relevant bacteria. The chip is useful for detecting clinically relevant bacteria. The chip is useful for detecting consecutate, easy and reliable identification of bacteria by genotypic characterization in a provided sample. Then, then it a complex biological sample. Then, then it a complex clinically relevant was a consecutive and also enables reliables reliables reliables. The chip accompanian a complex complex consecution of a bacterium aviant, a complex biological sample. Then, then it and also enables reliables.
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                                                                                                                                                                                                                                                                               Analytical chip useful for simultaneous determination of one or more different bacterial 16S-rRNA in liquid sample, comprising evanescent field measurement platform as solid carrier and several specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 243; SEQ ID NO 530; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                               recognition elements.
                                                                                                                                                                                                                 WPI; 2004-375537/35.
                                                                                                            Schrenzel J,
Kresbach GM,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  derived from bacteria such as Ahromobacter xylosoxidans, Acinetobacter baumannii, Actinomyces israelii, Aerococcus viridans, Acromonas baumannii, Actinomyces israelii, Aerococcus viridans, Aeromonas controllia, Agotobacterium radiobacter, Bacillus sp., Bacteroides ovatus, Campylobacter fetus, Citrobacter fremudii, Enterococcus avium controllia, Flacentia, Gardnerella vaginalis, Haemophilus influenzae, Hafnia alvei, Kingella sp., Klebsiella oxytoca controllia sinfluenzae, Hafnia alvei, Kingella sp., Klebsiella oxytoca controllia, Mycobacterium avium, Neisseria cinerea, Nocardia sp., Cohrobactrum anthropi, Pasteurella multocida, Peptostreptococcus magnus cohrobactrum anthropi, Shigella sonnei, Veillonella parvula, Veillonella sp. or Versinia enterocollitica. The chip is useful for detecting clinically relevant bacteria. The chip mables determination of one or more different bacterial 165-RRM in a liquid sample, simultaneously and embles rapid, accurate, easy and reliable identification of bacteria by
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to an analytical chip for simultaneous determination of one or more different bacterial 16S-rRNA in liquid sample. The chip is useful for detecting one or more bacterial 16S-rRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sequence represents a probe of the invention used as an analytical chip.
                                                                                                                                                                                                                                                                                                        Analytical chip useful for simultaneous determination of one or more different bacterial 16S-rRNA in liquid sample, comprising evanescent field measurement platform as solid carrier and several specific
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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Pred. No. 8.4e+02;
0; Mismatches 3; Indels
                                                                                                                                         Charbonnier Y, Jacquet JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 55; 82pp; English.
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                                                                                                                           Francois P, Char
Abel A, Ehrat M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADO18771 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%;
09-OCT-2002; 2002EP-00022631
                                                                 (UYGE-) UNIV GENEVE HOPITAUX.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 84.2°
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                         recognition elements.
                                                                                                                                                                                                                                           WPI; 2004-375537/35
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sequence represents a probe of the invention used as an analytical chip.
                                                                                                                                                                                                                                                                                                                  analytical chip; bacterial 16S-rRNA; genotypic characterization; probe;
                                                                                  Gaps
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                                                      0.8%; Score 14.2; DB 1; Length 19; 84.2%; Pred. No. 8.4e+02; ative 0; Mismatches 3; Indels
                           Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                        Analytical probe chip of the invention #453.
                                                                                                            1440 TGCCATGAAACATCCATTC 1458
                                                                                                                                 1 TGTCATGCAACATCCACTC 19
                                                                                                                                                                                                       ADO18694 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                           24-SEP-2003; 2003WO-EP010626.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-OCT-2002; 2002EP-00022631.
                                                                                                                                                                                                                                                             15-JUL-2004 (first entry)
                                                                                 16; Conservative
                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                     WO2004033720-A2
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                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                  AD018694;
                                                      Query Match
                                                                                                                                                                            RESULT 937
                                                                                 Matches
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24-SEP-2003; 2003WO-EP010626. 09-OCT-2002; 2002EP-00022631

22-APR-2004

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                                                                                                                                                                                                                                                                                                                                     The present invention relates to an analytical chip for simultaneous determination of one or more different bacterial 16S-rRNA, cardination of one or more bacterial 16S-rRNA, derived from bacteria such as Achromobacter xylosoxidans, Acinetobacter bannannii, Actinomyces israelii, Aerococcus viridans, Bacreroides hydrophilia, Agrobacterium radiobacter, Bacillus sp., Bacteroides cardylobacter fetus, Citrobacter freundii, Enterococcus avium contentum lentum, Escherchia coli, Flavobacterium breve, Eusobacterium nucleatum, Gemella morbillorum, Gardnerella vaqinalis, Haemophilus influenzes, Hafnia alvei, Kingella sy, Klebsiella oxytoca catarhalis, Mycobacterium avium, Neisseria cinerea, Nocardia sp., Cohrobactum anthropi, Basteurella multocida, Peptostreptococcus magnus cohrobactum anthropi, Basteurella multocida, Peptostreptococcus magnus, Ochrobactum anthropi, Basteurella sonnei, Veillonella parvula, Veillonella sp. or Yersinia enterocolitica. The chip is useful for detecting clinically relevant bacteria. The chip is useful for detecting clinically relevant bacteria. The chip enables determination of one or more different bacterial 16S-rRNA in a liquid sample, simultaneously and candentypic characterization in a provided sample and also enables chip which is produced at reduced cost, enables determination of 16S-rRNA in a sample with reduced experimental error and variation. The present corp which is produced experimental error and variation. The present corp.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  analytical chip; bacterial 16S-rRNA; genotypic characterization; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                      Analytical chip useful for simultaneous determination of one or more different bacterial 16S-rRNA in liquid sample, comprising evanescent field measurement platform as solid carrier and several specific
                                                   Charbonnier Y, Jacquet JG, Utinger D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.2; DB 1; Length 19; 44.2%; Pred. No. 8.4e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Analytical probe chip of the invention #515.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                 Claim 166; SEQ ID NO 453; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1440 TGCCATGAACATCCATTC 1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 TGTCATGCAACATCCACTC 19
                                                   P, Chark
Ehrat M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADO18756 standard; DNA; 19 BP
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     (UYGE-) UNIV GENEVE HOPITAUX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-JUL-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                     Francois
                                                                            Abel A,
                                                                                                                                                                                                                                                   recognition elements.
                                                                                                                          WPI; 2004-375537/35.
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                                                   Schrenzel J,
Kresbach GM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 938
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The present invention relates to an analytical chip for simultaneous determination of one or more different bacterial 16S-rRNA in liquid sample. The chip is useful for detecting one or more bacterial 16S-rRNA, derived from bacteria such as Achromobacter xylosoxidans, Acinetobacter baumannii, Actinomyces israelii, Aerococcus viridans, Acromonas hydrophilia, Agrobacterium radiobacter, Bacillus sp., Bacteroidas covatus, Campylobacter fetus, Citrobacter freundii, Enterococcus avium covatus, Campylobacter fetus, Citrobacter freundii, Enterococcus avium covatus, Landilum coli, Flavobacterium breve, Eusobacterium nucleatum, Gemella morbillorum, Gardnerella vaginalis, Comemphilus influenzae, Hafnia alvei, Kingella sp., Klebsiella oxytoca catarrhalis, Mycobacterium avium, Neisseria cinera, Nocardia sp., Lactobacillus acidophilus, Legionella pneumophila, Moraxella catarrhalis, Mycobacterium avium, Neisseria cinera, Nocardia sp., Chrobactrum anthropi, Pasteurella multocida, Peptostreptococcus magnus controbactum anthropi, Shigella sonnei, Veillonella parvula, Veillonella, Sp. or Yersinia enterocolitica. The chip enables detecting clinically relevant bacteria. The chip enables determination of one or core more different bacteria 16S-rRNA in a liquid ample, simultaneously and cance frigation of a bacterium even in a complex biological sample. The chip which is produced at reduced cost, enables determination of 16S-rRNA in a sample with reduced experimental error and variation. The present core sequence represents a probe of the invention used as an analytical chip.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                          Analytical chip useful for simultaneous determination of one or more different bacterial 16S-rRNA in liquid sample, comprising evanescent field measurement platform as solid carrier and several specific
Utinger D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.2; DB 1; Length 19; 34.2%; Pred. No. 8.4e+02; ved. 0; Mismatches 3; Indels
Charbonnier Y, Jacquet JG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 19 BP; 5 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                Claim 228; SEQ ID NO 515; 82pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1441 GCCATGAAACATCCATTCT 1459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19
        Francois P, Char
Abel A, Ehrat M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (HISM ) HISAMITSU PHARM CO LTD. (CHIB-) CHIBA PREFECTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 84.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16; Conservative
                                                                                                                                                                                                                                                                                                                       recognition elements.
                                                                                                                     WPI; 2004-375537/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2004039975-A1
        Schrenzel J,
Kresbach GM,
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Nakagawara A, Ohira M,

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The sequence originates from the chicken alpha-globin gene. It is the complement of primer (227) (AAQ24908). The selected primer is used in practice of the single primer amplification reaction (SPAR). (Updated on 25-MAR-2003 to correct PN field.)
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                                                                                                                                                 The present invention relates to human nucleic acid sequences (I; AD015739-AD015912) obtained from 4 synthesis-period (stage 4S) of neuroblastoma cell. (I) is useful for prognosing and determining the progress stage of 4 synthesis-period of neuroblastoma. The present sequence is a primer, used to illustrate the invention.
                                                          Novel nucleic acid obtained from 4 synthesis-period of neuroblastoma cells useful for prognosing and determining progress stage of
                                                                                                                                                                                                                                                                     0.8%; Score 14.2; DB 1; Length 19;
84.2%; Pred. No. 8.4e+02;
ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.2; DB 1; Length 20;
84.2%; Pred. No. 8.7e+02;
ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 6 A; 10 C; 1 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                         Sequence 19 BP; 3 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                    Claim 8; SEQ ID NO 269; 455pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Single primer amplification; SPAR; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chicken alpha-globin primer (242).
                                                                                                                                                                                                                                                                                                                                 1192 ACAGGCCGTCCCCTCTTTC 1210
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                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ24922 standard; DNA; 20 BP
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Matches 16; Conservative
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Best Local Similarity 84.2
Matches 16; Conservative
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                            WPI; 2004-390323/36.
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                                                                                        neuroblastomas.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-NOV-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-NOV-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W09207948-A1
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19-NOV-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAQ24922;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New oligo-nucleotide inhibits cytomegalovirus replication - by binding to a portion of cytomegalovirus RNA, for the diagnosis, prophylaxis and treatment of CMV diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT11971-84 are antisense oligonuclectides (ONs) against human cytomegalovirus (CMV) that displayed activities of at least 50 % of control (ISIS 2922 shown in AAT11961). It was found that up to 4 internal mismatches could be tolerated without loss of antiviral activity. Antisense ONs targeting CMV DNA or RNA coding for the ISI, IE2 or DNA polymerase proteins have been shown to be effective in therapy, polymerase proteins have been shown to increase their efficacy. Modified to reduce nuclease resistance and to increase their efficacy. Modifications include phosphorothicate backbones, alkyl and halogen-substituted sugar modelies at the 2' position. (Updated on 25-MAR-2003 to correct PR
                                                                                                                                          CMV; human; therapy; prophylaxis; diagnosis; IE1; IE2; DNA polymerase gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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0
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Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                              /note= "phosphorothioate backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
                                                                                                               CMV antisense oligonucleotide (ISIS 5476)
                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 10; Col 17; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        131 GGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                        Baker B, Draper K, Anderson K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ~
             BP.
                                                                                                                                                                                                                                                                                                                                                   93US-00009263.
                                                                                                                                                                                                                                                                                                                                                                                92US-00927506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAAGAAGAAGAGCAAACG
                                                                                                                                            antisense; cytomegalovirus;
intermediate early complex;
          AAT11973 standard; DNA; 20
                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16; Conservative
                                                                                                                                                                                                                                 1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                      (revised)
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1995-292538/38
                                                                                                                                                                                                                               modified base
                                                                                                                                                                                                                                                                                                                                                   25-JAN-1993;
                                                                                                                                                                                                                                                                                                                                                                                19-NOV-1992;
                                                                    25-MAR-2003
13-MAR-1996
                                                                                                                                                                                                                                                                                           US5442049-A
                                                                                                                                                                                                                                                                                                                      15-AUG-1995
                                                                                                                                                                                        Synthetic
                                         AAT11973;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
AAT11973/
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AAQ84817 standard; DNA; 20 BP

RESULT 942

AAQ84817 ID AAQ

0

Gaps

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WO9529260-A2
                       WO9504748-A1.
                                                                                                                           SISI (-SISI)
                                                                                                                                                   Anderson KP,
                                                                         09-AUG-1994;
                                                                                                  09-AUG-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-JUN-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= a hotel (and preferably all) of the backbone subunits are composed of amide units, so that the oligomer consists of the nucleobases attached covalently
                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ84817 and AAQ84818 are a pair of primers for the PCR amplification of AAQ84793, a new autosomal dominant spinocerebellar ataxia type 1 (SCA 1) nucleic acid, which enrodes the protein product described in AAR71111. Both the nucleic acid and the protein can be used to develop products, for the presymptomatic detection of a SCA 1 disorder. (Updated on 25-MAR-
                                                                                                                                                                                                                                                                                                                                                          New autosomal dominant spinocerebellar ataxia type 1 nucleic acid - used to develop prods. for detection or presymptomatic diagnosis of a SCA1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
                                                                          Spinocerebellar ataxia type 1 (SCA 1) PCR primer 9-1 (2919-2900)
                                                                                             Spinocerebellar ataxia type 1; SCA 1; presymptomatic diagnosis; PCR primer 9-1 (2919-2900); ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peptide nucleic acid targetting CMV IE2 nuc sig 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                              Example II; Page 72; 111pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAGGATGACCAGCCCTGT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT01674 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0.8%;
                                                                                                                                                                                                                                                                                                           Chung M, Zoghbi HY;
                                                                                                                                                                                                                   94WO-US007336.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antiviral; diagnostic; ss.
                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ...20
*tag=
                                                                                                                                                                                                                                                                                   (MINU ) UNIV MINNESOTA.
                                         (revised)
                                                                                                                                                                                                                                                                                                                                 WPI; 1995-061001/08
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                                                                                                                                                                    WO9501437-A2
                                                                                                                                                                                                                      29-JUN-1994;
                                                                                                                                                                                                                                            29-JUN-1993;
28-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-DEC-1995
                                       25-MAR-2003
25-SEP-1995
                                                                                                                                                                                            12-JAN-1995
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                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT01674;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40
              AAQ84817;
                                                                                                                                                                                                                                                                                                         Orr HT,
                                                                                                                                                                                                                                                                                                                                                                                        disorder
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New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridisable to AuG region, 5 untranslated region, intron/exon (I/E) junction or coding sequence of cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or papillomavirus. The PNAs can be used to target RNA and single stranded DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and pacific mushas). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which a first PNA strand thinds with RNA or ssDNA and a second PNA strand binds with the resulting double helix or with the first PNA strand. The PNAs is posses no significant charge and are water soluble, which facilitates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cellular uptake. Futher, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by proteases. The present sequence targets CMV IB2 nuclear localisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New peptide nucleic acid oligomers hybridisable to cytomegalovirus or papilloma.virus - are stable anti:sense molecules with high affinity for single stranded DNA, used for treating infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Plant pathogen; fungus; Septoria nodorum; Septoria tritici; Fusarium; Pseudocercosporella herpotrichoides; Mycosphaerella fijienais; PCR; Mycosphaerella musicola; amplification; primer; ribosomal RNA gene; internal transcribed region; strain; capture; colourimetric assay; isolate; development; population; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.2; DB 1; Length 20; 34.2%; Pred. No. 8.7e+02; ved. 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ecker DJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other;
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to a polyamide backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Crooke ST, Mirabelli CK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             131 GGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 2; Page 44; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP
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                                                                                                                                                                                                                                         94WO-US009039
                                                                                                                                                                                                                                                                                                                93US-00104438
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ94391 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                                                                                           PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1995-090841/12.
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1549 CTTCGGTCTTCGTCGATGC 1567
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            Claim 5; Page 15; 65pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Col 6; 10pp; English.
                                                                                                                                                                                                                                                                       19 crecerrerrearcearec 1
                                                                                                                                                                                                                                                                                                                                   AAQ91602 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       93US-00065845.
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                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (USGO ) US GOVERNMENT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zakroff S, Lasker B,
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                                                                                                                                                                                                            Local Similarity
hes 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                      Candida spp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-MAY-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US5426027-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                          AAQ91602;
                                                                                                                                                                                                   Query Match
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                                                                                                                                                                                                                                                                                                          RESULT 946
                                                                                                                                                                                                                           Matches
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                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                  A novel method for the detection of plant pathogenic strains of fungi
e.g. Septoria nodorum, S.tritici, Pseudocercosporella herpotrichoides,
Wycosphaerella fijiensis, M.musicola or Fusarium spp, involves the PCR
amplification of sequences found in the internal transcribed region (ITS)
of the 185, 5.85 and 285 ribosomal RNA genes by the primers AA094359-93
and AAT05357-72. These primers are derived from the ITS sequences of
these fungi (AAT05394-105404 and AA094398) and are strain specific. The
amplification products of the reactions using these primers can be used
with the capture primers AAT05378-93 in colourimetric assays. The primers
and ITS DNAs can be used for the detection of specific fungal pathogen
                                                                                                                              encoding intervening transcribed sequence - used for detection of nt fungal pathogens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Plant pathogen; fungus; Septoria nodorum; Septoria tritici; Fusarium; Pseudocercosporrella herpotrichoides; Mycosphaerella fijiensis; PCR; Mycosphaerella musicola; amplification; primer; ribosomal RNA gene; internal transcribed region; strain; capture; colourimetric assay; isolate; development; population; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA encoding intervening transcribed sequence - used for detection of plant fungal pathogens.
                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                          isolates and in monitoring disease development in plant populations
                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                    0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.8S ribosomal RNA gene ITS primer ITS3.
                                                                                                                                                                                                                                                                                                                                                                                                     1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                               Claim 5; Page 15; 65pp; English
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            95WO-US004712.
                                  94US-00233608,
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                                                        (CIBA ) CIBA GEIGY AG
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                                                                                                      WPI; 1995-383005/49.
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                                                                                Ligon JM, Beck JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Beck JJ;
                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
les 16; Conser
            19-APR-1995;
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                                 25-APR-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-JUN-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ94392
                                                                                                                                          plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                              ONA
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A novel method for the detection of plant pathogenic strains of fungiengy. Septoria nodorum, S.tritici, Pseudocercosporella herpotrichoides, Mycosphaerella fijiensis, M.musicola or Fusarium spp, involves the PCR amplification of sequences found in the internal transcribed region (ITG) of the 18S, 5.8S and 28S ribosomal RNA genes by the primers AAQ94359-93 and AAT05357-72. These primers are derived from the ITS sequences of these fungi (AAT05394-705404 and AAQ94398) and are strain specific. The amplification products of the reactions using these primers can be used with the capture primers AAT05378-93 in colourimetric assays. The primers and ITS DNAs can be used for the detection of specific fungal pathogen isolates and in monitoring disease development in plant populations
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ91602 is an universal primer for the Candida spp. internally transcribed spacer 2 (ITS2). The ITS can be used for the detection of Candida spp., partic. for the diagnosis of systemic candidiasis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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44.2%; Pred. No. 8.7e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           internally transcribed spacer 3 (ITS3) primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.2; DB 1; Length 2
84.2%; Pred. No. 8.7e+02;
ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Morrison CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19 CTGCGTTCTTCATCGATGC 1
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The sequences given in AAT03664-73 are oligonucleotides which are used in the diagnosis of hepatitis C virus (HCV). These oligonucleotides acts as primers to amplify region of the HCV genome, pref. hypervariable regions. The amplified product is subjected hotologues under denaturing conditions. Preferably, primer MS1, MS2, MS3, MS4, MS5 or MS6 and an oligo selected from MR1, MR2 or MR1' are used as primer pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              L-proline-4-hydroxylase, convert, catalyse, L-proline, production, trans-4-hydroxy-L-proline, 2-ketoglutaric acid, ferrous ion, industrial scale, intermediate, manufacture, drug, food additive, primer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA coding for L-proline-4-hydroxylase of microbial origin - for large scale production of trans-4-hydroxy-L-proline, useful as an intermediate in drug synthesis or as a food additive.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT47929-30 are primers used to amplify the sequence encoding the N-terminal of L-proline-4-hydroxylase (WO9291) from Dactylosporangium sp. The enzyme converts L-proline to trans-4-hydroxy-L-proline in the presence of 2-keroglutaric acid and ferrous ions. The DNA (AAT47924) is used for the efficient production of trans-4-hydroxy-L-proline on an industrial scale for use as an intermediate in the manufacture of drugs and as a food additive
                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                   Oligo:nucleotide primers for amplifying hepatitis C virus cDNA - specifically the hyper:variable regions, useful for diagnosis of hepatitis C.
                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Primer for N-terminal L-proline-4-hydroxylase coding sequence.
                                                                                                                                                                                                                                                                                                                                                                   Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                            3; Indels
                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 2 A; 6 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                     Score 14.2; DB 1;
Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 51; 83pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                               916 CIGITCCIGITCCAGCIGC 934
                                                                                                                                                                Claim 4; Page 2; 27pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGTTGATGTGCCAGCTGC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ë
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCR; polymerase chain reaction,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95JP-00046988.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (KYOW ) KYOWA HAKKO KOGYO KK.
                                                                                                                                                                                                                                                                                                                                                                       0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 84.2°
....has 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAT47929 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1996-425429/42
                                                    WPI; 1996-064846/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ozaki A, Mori H,
               (SRLS-) SRL KK.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-MAR-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT47929;
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                                                                                                                                                                                                                      Internally transcribed spacer 2, ITS2, systemic candidiasis, detection, diagnosis, universal primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AA091604 is an universal primer for the Candida spp. internally transcribed spacer 4 (ITS4). The ITS can be used for the detection of Candida spp., partic. for the diagnosis of systemic candidasis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    detection of
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated Candida nucleic acid sequences - used for detect
Candida species, partic. for diagnosing systemic candidiasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match

0.8%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                       Candida spp. internally transcribed spacer 2 (ITS2) primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            闰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Reiss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Morrison CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hepatitis C diagnostic oligonucleotide MR2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Col 15-16; 10pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lott TJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT03667 standard; DNA; 20 BP.
                                                                          AAQ91604 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94JP-00142564,
                                                                                                                                                                                                                                                                                                                                                                                              93US-00065845.
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                                                                                                                                                                                                                                                                                                                                                                                                                                   93US-00065845
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                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (USGO ) US GOVERNMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lasker B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1995-230900/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JP07322881-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                              20-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                   20-MAY-1993;
                                                                                                                                                                                                                                                                                                                        US5426027-A.
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20-JUN-1995

Zakroff S,

Synthetic.

AAT03667;

RESULT 948

AAT03667

1549

à g

diagnosis;

AAQ91604;

RESULT 947

AAQ91604

Synthetic.

BP.

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AAT66009 standard; DNA; 20
   AAT66009/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes novel phosphonomonoester oligomucleotide analogues which act as inhibitors of gene expression (as sense/antisense, intooxyme or triphex-forming molecules), useful as diagnostic agents (i.e. probes for detecting nucleic acid) or for treatment of diseases caused by viruses, influenced by integrins or cell-cell adhesion receptors, induced by factors such as TNP-alpha, or cancer or restenosis. The products of the invention satisfy the requirements of good in-vivo stability; ability to cross cellular and nuclear membranes, and specific binding to target nucleic acid better than known oligonucleotides. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                      Phosphonomonoester analogue; inhibitor; antisense; cancer; restenosis; ribozyme; diagnostic agent; detection; treatment; disease; virus; integrin; cell-cell adhesion receptor; TNF-alpha; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New oligo:nucleotide analogues contg. phospho:mono:ester bridges - for therapeutic inhibition of gene expression, e.g. in cancer or viral infection, with good specificity and in vivo stability.
                                                         Gaps
                                                         ;
0
                                Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
                                                                                                                                                                                                                                  HSV-directed phosphonomonoester oligonucleotide analogue 5.
                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                Breipohl G, Wallmeier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 2 A; 2 C; 14 G; 2 T; 0 U; 0 Other;
           BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 18; 36pp; German.
                                                                           856 AAGGACCTGAAGCAGTACC 874
                                                                                                1 ACGGAGCTCAAGCAGTACC 19
                                                                                                                                                         멾.
                                                                                                                                                                                                                                                                                                                                                                             95DE-01008923.
                                                                                                                                                                                                                                                                                                                                                                                                   95DE-01008923.
                                0.8%;
                                           84.2%;
                                                                                                                                                      AAX24129 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                              Anuschirwan P, Uhlmann E,
                                                                                                                                                                                                             (first entry)
                                           Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                   (revised)
                                                                                                                                                                                                                                                                                                              Human herpesvirus 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1996-425893/43.
                                                                                                                                                                                                                                                                                                                                                                                                                       (FARH ) HOECHST AG.
                                                                                                                                                                                                                                                                                                                                   DE19508923-A1
                                                                                                                                                                                                                                                                                                                                                                            13-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                  13-MAR-1995;
           Sequence 20
                                                                                                                                                                                                 27-AUG-2003
01-JUL-1999
                                                                                                                                                                                                                                                                                                                                                        19-SEP-1996.
                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                            AAX24129;
                                 Query Match
                                                                                                                                RESULT 950
                                                                                                                                           XX
So
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The invention relates to the isolation of polymorphic repeat sequences markers. Primers based on these sequences can be used as genetic markers. Primers based on these sequences can be used to detect these repeats, especially for use in e.g paternity or maternity testing, human genetic analysis such as linkage analysis of genetic disease, commercial animal or plant breeding or pedigree analysis. Clones containing the repeat sequences were isolated by hybridisation of chromosome-specific phage libraries with a synthetic poly (dc-dA). (dg-dT) probe. Over 100 repeat blocks were isolated. The primers AAT55798-T66047 were used to PCR amplify the inserts from the isolated clones containing the repeat sequences. The primers AAT66009.9 were used to amplify the repeat sequence marker clone Mfd106 (AAT65777). (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ó,
                                                                                                                                                                                          Polymorphism; repeat sequence; genetic marker; primer; amplification; PCR; polymerase chain reaction; paternity; maternity; human; pedigree; linkage analysis; genetic disease; animal; plant; breeding; locus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Detection of polymorphic genetic markers of the form (dC-dA)n(dG-dT)n using novel nucleic acid mols. as primers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Primer ITS2 for Candida internal transcribed spacer 2.
                                                                                                                                    Primer #2 to amplify repeat sequence marker Mfd106.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 4 A; 4 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 7; Col 13-14; 186pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                708 GATCAGACTGGAACATGAA 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ŋ
                                                                                                                                                                                                                                                                         hybridisation; chromosome; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91US-00754351.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  89US-00341562.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94US-00222177.
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                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MARS-) MARSHFIELD CLINIC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                        (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1997-042299/04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               correct PF field.)
                                                                                                                                                                                          Polymorphism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-APR-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-SEP-1991;
                                                  25-MAR-2003
18-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                 US5582979-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                       10-DEC-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-2003
04-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16;
                                                                                                                                                                                                                                                                                                                           Synthetic.
AAT66009;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Weber JL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT84760;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAT84760/
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Gaps

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0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02; ive 0; Mismatches 3; Indels

0,

Conservative

16;

Best Loca Matches

Local Similarity

Query Match

553 CCCTCAGCCGCCCTCC 571

à

CCCCTCAGCAGCCTCCCCC 1

19

RESULT 951

0

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Isolated nucleic acid specific for internal transcribed spacer of Candida krusei - can be detected by specific probe for rapid and sensitive diagnosis of systemic candidiasis.
                                         The present sequence is a primer for the PCR amplification of the Candida internal transcribed spacer 4 (ITS4), which can be used in the diagnosis systemic candidiasis. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence is an universal Candida internal transcribed spacer (ITS) primer for the detection of ITS, useful to diagnose systemic Candida infection, i.e. candidiasis. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                             Gaps
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0
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                                                                                                                                                    Match 0.8%; Score 14.2; DB 1; Length 20; Local Similarity 84.2%; Pred. No. 8.7e+02; les 16; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%; Score 14.2; DB 1; Length 20; ilarity 84.2%; Pred. No. 8.7e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Candida universal internal transcribed spacer primer, ITS2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Morrison CJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                    Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lott IJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (USSH ) US DEPT HEALTH & HUMAN SERVICES
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               Example 1; Col 13-14; 10pp; English.
                                                                                                                                                                                                                             1549 CTTCGGTCTTCGTCGATGC 1567
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           polymerase chain reaction; ss.
                                                                                                                                                                                                                                                                                                                                                           BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 16; Conserv
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24-SEP-1997
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AAT75523
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Primer, internal transcribed spacer 2, ITS2; diagnosis; PCR; amplification; polymerase chain reaction; systemic candidiasis; ss.
                                                                                                                                                                                                                                                                                                                                            Candida tropicalis internal transcribed spacer 2 - and probes that hybridise to it, useful for highly sensitive diagnosis of systemic
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84.2%; Pred. No. 8.7e+02;
tive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                         Morrison CJ;
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Best Local Similarity 84.2
Matches 16; Conservative
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                                                                                                                                                                 26-APR-1995;
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04-NOV-1997
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                                                          Synthetic
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à a ö

AAT75523;

Synthetic.

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AAT68369-T68381 and AAT70842 are a set of primers used in a method for assessing the integrity of a Y chromosome. The primers are capable of priming the chromosome loci: SMCY, DYS217, DYS220, DYS213, DYS7, DYS237, DYS215, MC2 and DAZ(6) and MC2. The method can be used to rapidly and reproducibly assess the integrity of specific regions of the Y chromosome that are associated with male fertility. It can be used to assess the integrity of the Y chromosome in males exhibiting azoospermia or oligospermia (no or very little spermatozoa in the semen) or to assess the genotype of infants of phenotypically ambiguous sexuality. The method can also be used in diagnosis and quality control
                                                                                                                                                                                                                                                                                                        Assessing integrity of Y chromosome - by amplification of selected human chromosome loci by multiplex PCR and comparison with normal control DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        genetic disease, genetic trait, dog, carrier of recessive disease, copper toxicosis, CT; canine genome map, breed-specific profile, DNA fingerprint, dog identification, PCR; primer, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%; Score 14.2; DB 1; Length 20;
44.2%; Pred. No. 8.7e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Canine disease marker-related PCR primer 917.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                 96WO-US009421
                                                                                                                     95US-00472416.
95US-00531556.
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(UNMS ) UNIV MICHIGAN STATE.
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ADG78073/c
ID ADG78073 standard; DNA; 20
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                                                                                                                                                                                                                         Agoulnik AI,
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                                                                                                                                                                                   (PROM-) PROMEGA CORP
                                                                                                                                                                                                                                                                  WPI; 1997-099942/09
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  WO9641007-A1
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                                                                                 06-JUN-1996;
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                                                                                                                       07-JUN-1995;
                                                                                                                                            18-SEP-1995;
                                        19-DEC-1996.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Isolated nucleic acid specific for internal transcribed spacer of Candida krusei - can be detected by specific probe for rapid and sensitive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence is an universal Candida internal transcribed spacer (ITS) primer for the detection of ITS, useful to diagnose systemic Candida infection, i.e. candidiasis. (Updated on 25-MAR-2003 to correct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Y chromosome; integrity; chromosome locus; primer; amplification; PCR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Loci-specific primer for assessing integrity of human Y chromosome.
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0
                                                                                                                                                                                 Internal transcribed spacer, ITS; detection, probe; diagnosis; systemic infection; candidiasis; primer; PCR; amplification;
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Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                        Candida universal internal transcribed spacer primer, ITS4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Morrison CJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lott TJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (USSH ) US DEPT HEALTH & HUMAN SERVICES.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        diagnosis of systemic candidiasis.
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                                                                                                                                                                                                                           polymerase chain reaction; ss.
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AAT75523 standard; DNA; 20
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                                                                                                    (first entry)
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                                                                                 (revised)
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Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                20-MAY-1993;
                                                                            25-MAR-2003
24-SEP-1997
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PF field.)

AAT68379

RESULT 956

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BKM; ss

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Gaps

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This invention relates to novel oligonucleotide PCR primers which may be used to identify markers associated with genetic diseases and traits in dogs, in particular to diagnose genetic diseases that are not phenotypically visible and to identify carriers of recessive diseases. A specific application is diagnosis of copper toxicosis (CT). The invention generate bread to create a genetic map of the canine genome; to generate bread-specific profiles; to establish paternity and to identify dogs from DNA fingerprints. The method provides rapid analysis of the target sequences from only a small sample of DNA. Diagnosis can be done at any time in the dog's life. The present sequence is that of a PCR primer of the invention.
New oligonucleotide primers for diagnosis of genetic diseases and traits in dogs - amplify specific regions of the genome containing microsatellite repeats, especially for diagnosing copper toxicosis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 1 A; 8 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                            Claim 1; Page 19; 40pp; English
                                                                                          carriers
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Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
); Mismatches 3; Indels
                          0;
                                                    681
                                                                            CAGAGGCAGAAGCAGGCTC 1
                                                   663 CAAAGGCAAAAGCAAGCTC
   0.8%;
Query Match
Best Local Similarity 84.2
Matches 16; Conservative
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Gaps

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Canine disease marker-related PCR primer 474.
     20
                (first entry)
     standard; DNA;
                11-MAR-2004
           ADG77630;
     ADG77630
RESULT 958
   ADG77630
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genetic disease; genetic trait; dog; carrier of recessive disease; copper toxicosis; CT; canine genome map; breed-specific profile; DNA fingerprint; dog identification; PCR; primer; ss. Canis familiaris

WO9731011-A1

28-AUG-1997.

96US-0012060P 97WO~US002396 18-FEB-1997; 22-FEB-1996;

Yuzbasiyan-Gurkan V; (UNMI ) UNIV MICHIGAN. (UNMS ) UNIV MICHIGAN STATE. Venta PJ, Brewer GJ,

WPI; 1997-435082/40.

New oligonucleotide primers for diagnosis of genetic diseases and traits in dogs - amplify specific regions of the genome containing microsatellite repeats, especially for diagnosing copper toxicosis and

Claim 1; Page 15; 40pp; English.

carriers

This invention relates to novel oligonuclectide PCR primers which may be used to identify markers associated with genetic diseases and traits in dogs, in particular to diagnose genetic diseases that are not phenotypically visible and to identify carriers of recessive diseases. A specific application is diagnosis of copper toxicosis (CT). The invention

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequences AAV62507 to AAV62566 represent species specific PCR primers for various fungal isolates used for fungal detection in the course of the invention. The primers are designed based on the internal transcribed spacer (ITS) sequences of the various fungal species. The invention provides a DNA molecule isolated from the ribosomal RNA gene region of selected from ITS of Posarium culmorum, Fusarium graminearum, Evsarium moniliforme, Septoria avenae or Microdochicum nivale. A method for detecting F graminearum, F. culmorum, F. moniliforme, F. poae, F. avenaceum and M. nivale isolates is also provided which comprises pathogens and amplifying parts of the ITS sequence of the above PCR using specific primers from within these sequences. The pathogen(s) by PCR using specific primers from within these sequences. The pathogen(s) by are detected by visualising the amplified part of the ITS sequence
can also be used to create a genetic map of the canine genome; to generate breed-specific profiles; to establish paternity and to identify dogs from DNA fingerprints. The method provides rapid analysis of the target sequences from only a small sample of DNA. Diagnosis can be done at any time in the dog's life. The present sequence is that of a PCR primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Internal transcribed spacer; ITS; ribosomal RNA; Fusarium avenaceum; Fusarium culmorum; Fusarium graminearum; Fusarium moniliforme; plant; Septoria avenae; Microdochicum nivale; Fusarium poae; fungal pathogen; PCR; nucleic acid detection; PCR primer; ss.
                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA isolated from fungal RNA, and its internal transcribed spacer sequence - used for detecting fungal pathogens in plant tissue.
                                                                                                                                                                                                      0
                                                                                                                                                                   Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                Sequence 20 BP; 0 A; 9 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ribosomal gene 5.85 rDNA specific primer ITS3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 6; Col 17; 56pp; English.
                                                                                                                                                                                                                                         826 TCCCTCACCCTTGTTG 844
                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (NOVS ) NOVARTIS FINANCE CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95WO-US004712.
96US-00722187.
                                                                                                                                                                       0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-00887480
                                                                                                                                                                                     84.28;
                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                  AAV62540 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1998-541745/46
                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-APR-1995;
15-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                      17-DEC-1998
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                                                                                                                                                                                                          16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                   AAV62540;
                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fusarium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Beck JJ;
                                                                                                                                                                                                                                                                                                                                                  AAV62540/c
                                                                                                                                                                                                                                                                                                                               RESULT 959
                                                                                                                                                                                                          Matches
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AAV59027;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Beck JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 962
                                         AAV59027/
ID AAV5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAV59024
                                                                                                                $\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac{1}{2}$\frac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               invention. The primers are designed based on the internal transcribed spacer (ITS) sequences of the various fungal species. The invention provides a DNA molecule from the ribosomal RNA gene region of a fungal pathogen, where the DNA molecule consists of an ITS sequence selected from ITS1 and ITS2 of Fusarium culmorum, Fusarium graminearum, Fusarium moniliforme, Septoria avenae or Microdochicum nivale. A method for detecting F. graminearum, F. culmorum, F. moniliforme, F. poae, F. avenaecum and M. nivale isolates is also provided which comprises isolating DNA from a plant leaf infected with at least one of the above pathogens and amplifying parts of the ITS sequence of the pathogen(s) by PCR using specific primers from within these sequences. The pathogen(s) are detected by visualising the amplified part of the ITS sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Internal transcribed spacer; ITS; ribosomal RNA; Fusarium avenaceum; Pusarium culmovum; Fusarium graminearum; Fusarium moniliforme; plant; Septoria avenae; Microdochicum nivale; Fusarium poae; fungal pathogen; PCR; nucleic acid detection; PCR primer; ss.
                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA isolated from fungal RNA, and its internal transcribed spacer sequence - used for detecting fungal pathogens in plant tissue.
                                                                              0;
       Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 20;
Score 14.2; DB 1; Length 2 Pred. No. 8.7e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 14.2; DB 1;
Pred. No. 8.7e+02;
); Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ribosomal gene 5.85 rDNA specific primer ITS2.
                                                                                                                                              1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 6; Col 17; 56pp; English.
                                                                                                                                                                                       CTGCGTTCTTCATCGATGC 1
                                                                                                                                                                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (NOVS ) NOVARTIS FINANCE CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96US-00722187.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95WO-US004712.
   0.8%;
                                     84.28;
                                                                                                                                                                                                                                                                                                                                                                                                  AAV62539 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-DEC-1998 (first entry)
                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1998-541745/46.
                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US5814453-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fusarium sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-SEP-1998
                                                                           16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                     19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAV62539;
Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beck JJ;
                                         Best Local
                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                      NAMES OF COLOR OF STREET STREE
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                                                                                                                                                                                                                                              Internal transcribed spacer, ITS; Microdochium; Fusarium; wheat pathogen; fungal pathogen identification; infection identification; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Internal transcribed spacer, ITS, Microdochium; Fusarium; wheat pathogen, fungal pathogen identification; infection identification; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wheat pathogen internal transcribed spacer sequences - used as a basis for primers for the species-specific polymerase chain reaction detection of the pathogens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
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Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (Updated on 25-MAR-2003 to correct PR field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Internal transcribed spacer primer ITS28.
                                                                                                                                                                                         Internal transcribed spacer primer ITS3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 5; Col 10; 20pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19 CTGCGTTCTTCATCGATGC 1
AAV59027 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (NOVS ) NOVARTIS FINANCE CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97US-00905314.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV59024 standard; DNA; 20
                                                                                                                                       (first entry)
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(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MPI; 1998-593995/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-AUG-1997;
                                                                                                                                                                                                                                                                                                                         Synthetic.
Fusarium sp.
                                                                                                         25-MAR-2003
06-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                         US5827695-A.
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06-JAN-1999
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· 0

Gaps

0;

3; Indels

.; 0

16; Conservative

Matches

à

Local Similarity

1549 CTTCGGTCTTCGTCGATGC 1567

crecerrerrearcearee 20

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PCR primers AAV43271-76 were used to isolate internal transcribed spacer (ITS) regions from Helminthosporium turcicum isolates 6586, 26306 and 6402, H. maydis isolates 6921, 11534 and 24772, H. carbonum isolates 5870 and 6185, Kabatiella zeae isolates 5631, 18594 and 5125 and Cercospora zeae-maydis isolates 5860, POPS 12 and Ladder 3-1. The specification describes a method for the detection of a maize fungal pathogen. The method comprises isolating DNA from a plant leaf infected with a pathogen, subjecting the DNA to PCR amplification using at least one primer derived from the ITS sequence (see AAV43277-303)
                                                                                                                                 PCR primers AAV43271-76 were used to isolate internal transcribed spacer (ITS) regions from Helminthosporium turcicum isolates 6586, 26306 and 6402, H. maydis isolates 6921, 11534 and 24772, H. carbonum isolates 5870 and 16185, Kabatiella zeae isolates 5631, 1854 and 5125 and Cercospora zeae-maydis isolates 5860, POPS 12 and Ladder 3-1. The specification describes a method for the detection of a maize fungal pathogen. The method comprises isolating DNA from a plant leaf infected with a pathogen, subjecting the DNA from a plant leaf infected with a primer derived from the ITS sequence (see AAV43277-303)
              New internal transcribed spacer sequences of maize fungal pathogens and primers and primer pairs - used to detect pathogens e.g. Helminthosporium carbonum, Cercospora zeae-maydis and Kabatiella zeae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New internal transcribed spacer sequences of maize fungal pathogens and primers and primer pairs – used to detect pathogens e.g. Helminthosporium carbonum, Cercospora zeae-maydis and Kabatiella zeae.
                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Internal transcribed spacer; ITS; detection; maize; fungal pathogen;
                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                 Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCR primer ITS2 used to isolate ITS regions.
                                                                                                 Example 2; Page 11; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; Page 8; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                               0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97EP-00810779.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAV43272 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 84.2
Matches 16; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1998-429687/37
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-OCT-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EP859061-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAV43272;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Beck JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 964
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence represents a primer based on an internal transcribed spacer (ITS) sequence of the invention. Primer pairs, based on the ITS sequences, are used for the PCR amplification detection of wheat Microdocchium and Fusarium fungal pathogens, especially M. nivale, F. graminearum, F. culmorum, F. avenaceum, F. poae, F. moniliforme or F. roseum. The two different strains of fungi show different symptoms during infection, which may or may not be due to infection. Early identification of the strain causing the infection allows early, and more specific fungicidal treatment. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                 a basis
detection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Internal transcribed spacer; ITS; detection; maize; fungal pathogen;
PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                 yen internal transcribed spacer sequences - used as for the species-specific polymerase chain reaction
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Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Seguence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer ITS3 used to isolate ITS regions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 2; Col B; 20pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGCGTTCTTCATCGATGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV43273 standard; DNA; 20 BP.
                                                                                                                                                                                                                            (NOVS ) NOVARTIS FINANCE CORP.
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                                                                                                                                                                                                                                                                                                                                                 Wheat pathogen internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1998-429687/37.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best_Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                         of the pathogens.
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                                                                                                                                              04-AUG-1997;
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                                                             US5827695-A
                         Fusarium sp
                                                                                                     27-OCT-1998
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                                                                                                                                                                                                                                                                     Beck JJ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             963
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Lipid metabolic pathway; h-LMP-1 gene; cardiovascular disease; atheroscierosis; biliary tract disorder; gall stone; therapy; diagnosis;
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                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA encoding lipid metabolic pathway polypeptide(s) - useful for treatment of cardiovascular disease or modulation of lipid uptake or
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.2; DB 1; Length 20;
84.2%; Pred. No. 8.7e+02;
rative 0; Mismatches 3; Indels
                                                         3; Indels
                                                                                                                                                                                                                                                                           Human lipid metabolic pathway h-LMP-1 gene PCR primer.
Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                            Score 14.2; DB 1;
Pred. No. 8.7e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 9 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 85; 102pp; English.
                                                                                    1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             864 GAAGCAGTACCTGGATGAC 882
                                                                                                        2 CTGCGTTCTTCATCGATGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 GAAGAAGAACCAGGATGAC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV42503 standard; DNA; 20 BP
                            0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97WO-US015195.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96US-00707399
                                                                                                                                                                                      AAV11551 standard; cDNA; 20
                                                                                                                                                                                                                                                14-SEP-1998 (first entry)
                                                         16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                     human; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Acton S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-193545/17.
                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Simi
Matches 16;
                                                                                                                                                                                                                                                                                                                                                                                                          WO9809979-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             metabolism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gimeno CJ,
                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                   AAV11551;
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ID AAV425
XX
AC AAV425
XX
                                                         Matches
                                                                                                                                                          RESULT 965
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                     of a Y chromosome. Genomic DNA, or blood, from a subject is combined with priming several distinct oligomocleotide primer pairs capable of simultaneously priming several human Y chromosome loci which are linked to normal fertility in human males. The present primer pair (AAV42502-03) amplify amplified chromosomal DNA fragments which are isolated and compared with those from normal male subjects The method is useful to detect deletion mutations on a Y chromosome which are predictive of human male
                                                         Assay; Y chromosome; Y chromosome loci, human; male fertility, detection, deletion mutation; male infertility; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR primers AAV42472-511 are used in a method for assessing the integrity
                                                                                                                                                                                                                                                                                                                                                   Assessing Y chromosome integrity in predicting human male infertility by amplifying specific regions of human Y chromosome linked to normal fertility by multiplex PCR and detecting deletion mutations.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Phytophthora; potato; late-blight; P. infestans; P. erythroseptica; P. nicotianae; pink rot; detection; disease; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PCR primer specific for Phytophthora infestans sequences.
                              PCR primer 2 used to amplify human loci DYS7 DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1483 CACAAACTTCCTGACACTA 1501
                                                                                                                                                                                                                                                                                                                                                                                                               Claim 2; Page 35; 47pp; English.
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02-OCT-1998 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Phytophthora infestans
                                                                                                                                                                                                                                                                                            Muallem A;
                                                                                                                                                                                                                                                               (PROM-) PROMEGA CORP.
                                                                                                                                                                                                                                                                                                                         WPI; 1998-333352/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                  04-DEC-1996;
                                                                                                    Synthetic.
Homo sapiens.
                                                                                                                                                                                                       04-DEC-1997;
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AAV22643/c
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                                                                                                                                       Local Similarity 84.2
es 16; Conservative
                                                                                                                                                                                                                                                                                    AAV70045 standard; DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
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modified_base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
Rattus sp.
                                                                       diagnosis
                                                                                                                                                                                                                                                                                                                  AAV70045;
                                                                                                                            Query Match
                                                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                         RESULT 969
8888888888
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                                                                                                                                                                                                             pCR primers AAV22642-46 are specific for Phytophthora species which infect potatoes and cause diseases such as late-blight. PCR primers AAV2264-43 amplify a 456 bp fragment from P. infestens. PCR primers AAV22644-45 amplify a 136 bp fragment from P. erythroseptica, and PCR primers AAV22643 and AAV22646 amplify a 455 bp fragment from P. incotianae. The primer sets are useful for detecting Phytophthora species by PCR. Phytophthora species infecting potatoes may result in late blight (caused by P. infestans) or in pink rot (caused by P. erythroseptica and P. P. incotianae), and the primers can detect these diseases and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fanconi anaemia of complementation group A; FA-A; genetic defect; prenatal FA-A; FA-A carrier detection; disease diagnosis; PCR primer; ss.
                                                                                                                                 20
                                                                                                                            Oligomuclectide primers for PCR detection of Phytophthora spp. - e.g. detect P. infestans, which causes potato light blight and distinguish from P. erythroseptica and P. nicotianae, which cause pink rot.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA for Fanconi Anaemia complementation group A - useful for, e.g. developing products for diagnosis and screening of disease and gene
                                                                                                                                                                                                                                                                                                                                                                                                                                   .
                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 0.8%; Score 14.2; DB 1; Length 20; Best Local Similarity 84.2%; Pred. No. 8.7e+02; Matches 16; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Primer for Fanconi anaemia of complementation group A gene.
                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                        Hatziloukas E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (FANC-) FANCONI ANEMIA RES FUND INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               1549 CTTCGGTCTTCGTCGATGC 1567
                                                                          Carras M,
                                                                                                                                                                                        Claim 2; Page 27; 40pp; English.
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                96US-00704207
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                                                                                                                                                                                                                                                                                                                                                 differentiate between them
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                                            (USDA ) US SEC OF AGRIC
                                                                          Bunyard B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1998-240012/21.
                                                                                                     WPI; 1998-179378/16.
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Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-OCT-1997;
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                   28-AUG-1996;
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                                                                        Tooley
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specifically hybridisable with a region of a nucleic acid encoding rat c-
Fos protein. The antisense compound regulates the expression of the c-Fos
protein. The present invention also describes antisense oligonucleotides
which regulate the c-Jun protein. The antisense oligonucleotides are used
for the diagnosis and treatment of diseases or disorders associated with
Activating Protein i expression, of which c-Fos and c-Jun are subunits.
The antisense oligonucleotides are used in compositions as c-Fos and/or
-Jun together with a carrier and a chemotherapeutic agent. They are used
preferably by inhibiting metastasis. They also regulate cells or tissues,
expression and can be used to treat an animal with, or being prone to, a
                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense oligonucleotides regulating Activating Protein 1 subunits - hybridise with c-fos and c-jun mRNA, used for regulating metastasis, cell cycle expression and hyperproliferative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rat; c-fos; c-jun; activating protein 1; AP-1; diagnosis; metastasis; antisense oligonucleotide; phosphorothioate; regulation; malignant tumour; cell cycle expression; hyperproliferative disease; ss.
This sequence represents a PCR primer for the DNA encoding the Fanconi anaemia of complementation group A (FA-A) protein of the invention. The amplified DNA's may be used to complement a genetic defect in a cell (especially the FA-A gene). The products can be used for screening (especially prenatal FA-A), detection of FA-A carriers and FA-A disease
                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV70042 to AAV70052 represent antisense oligonucleotides which
                                                                                                                                                                                                                              ·:
0
                                                                                                                                                                                      Length 20;
                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
"phosphorothioate linkages"
                                                                                                                                               Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                    0.8%; Score 14.2; DB 1;
84.2%; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rat c-Fos protein antisense oligonucleotide #99.
                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Baker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 9; Page 57; 120pp; English
                                                                                                                                                                                                                                                                      259 GAGGCCCCCACACGTGCTG 277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dean NM, Mckay R, Miraglia L,
                                                                                                                                                                                                                                                                                                           19 GAGTGCCCCACATGTGCTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hyperproliferative disease
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ð a

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This sequence represents a primer for Candida nucleic acid sequences. T amplified sequences are recognised by the probes of the invention. The probes can be used in the method of the invention for the detection of Aspergillus sp. and Candida sp. in a sample. The probes can be used to diagnose systemic candidiasis. (Updated on 27-AUG-2003 to correct OS field.)
                                PCR primer; Candida detection; Aspergillus; systemic candidiasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ITS2 rDNA; systemic candidiasis; pathogen; diagnosis; PCR primer; ss.
                                                                                                                                                                                                                                                              - useful for diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Morrison CJ;
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
        Primer ITS2 for Candida nucleic acid sequences.
                                                                                                                                                                                                                 Shin JH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Candida albicans ITS2 rDNA PCR primer ITS3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lott IJ,
                                                                                                                                                                                        (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                              Probes for detection of Candida species
                                                                                                                                                                                                                 В,
                                                                                                                                                                                                                                                                                                 Example 2; Page 47; 55pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1549 CITCGGICTICGICGAIGC 1567
                                                                                                                                                                                                                Holloway
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 CTGCGTTCTTCATCGATGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zakroff S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                           97WO-US016423
                                                                                                                                                                 96US-0026387P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95US-00429520.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93US-00065845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAT89974 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            16; Conservative
                                                                                                                                                                                                                Reiss E,
                                                                                                                                                                                                                                                                            systemic candidiasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (USGO ) US GOVERNMENT
                                                                                                                                                                                                                                        WPI; 1998-216957/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Reiss E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1998-007977/01
                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
Candida albicans.
                                                                                                                                          15-SEP-1997;
                                                                                                                                                                16-SEP-1996;
                                                                                           WO9811257-A1
                                                                                                                                                                                                                Morrison CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-MAR-1998
                                                                                                                  19-MAR-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-NOV-1997.
                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lasker B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT89974;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                     Candida.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT89974/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence represents a primer for Candida nucleic acid sequences. The amplified sequences are recognised by the probes of the invention. The probes can be used in the method of the invention for the detection of Aspergillus sp. and Candida sp. in a sample. The probes can be used to diagnose systemic candidiasis. (Updated on 27-AUG-2003 to correct OS
                                                                                                                                                                                                                                                                        PCR primer; Candida detection; Aspergillus; systemic candidiasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Probes for detection of Candida species - useful for diagnosis of
                                                       .;
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                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.8%; Score 14.2; DB 1; Length 20;
84.2%; Pred. No. 8.7e+02;
tive 0; Mismatches 3; Indels
                                                     3; Indels
       Sequence 20 BP; 2 A; 2 C; 11 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                            Score 14.2; DB 1;
Pred. No. 8.7e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                               Primer ITS3 for Candida nucleic acid sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shin JH;
                                                                                                                                                                                                                                                                                                                                                                                                                               (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Holloway B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1; Page 16; 55pp; English.
                                                                            1720 AGCCATGTTCACCTGCCCA 1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                    19 AGCCATCTCCACCAGCCCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV24006 standard; DNA; 20 BP
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                              0.8%;
                                                                                                                                                                                                                                                                                                                                                                                  97WO-US016423
                                                                                                                                                                                                                                                                                                                                                                                                         96US-0026387P
                                                                                                                                                                                                                          (first entry)
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                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Reiss E,
                                                                                                                                                                                                               (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    systemic candidiasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-216957/19.
                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Morrison CJ,
                                                                                                                                                                                                                                                                                                                                                                                  15-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                         16-SEP-1996;
                                                                                                                                                                                                                                                                                                                                  WO9811257-A1
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06-AUG-1998
                                                     16;
                                                                                                                                                                                                             27-AUG-2003
                                                                                                                                                                                                                         06-AUG-1998
                                                                                                                                                                                                                                                                                                                                                          19-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16;
                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                     AAV24006;
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                            Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                             Candida.
                                                                                                                                      RESULT 971
AAV24009
ID AAV240
XX
AC AAV240
DT 27-AUG
DT 06-AUG
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Matches
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Indels

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Seguence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                            Candida albicans ITS2 rDNA PCR primer 1.
                                                                                                                                1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                          Disclosure; Col 6; 11pp; English
                      Example 1; Col 6; 11pp; English
                                                                                                                                       CTGCGTTCTTCATCGATGC 1
                                                                                                                                                                                                 (first entry)
                                                                                                                    Conservative
                                                                                                                                                                         AAT89976 standard; DNA;
                                                                                                                                                                                                                                                                                                     (USGO ) US GOVERNMENT
                                                                                                                                                                                                                                                                                                                 Lasker B, Reiss E,
                                                                                                                                                                                                                                                                                                                           WPI; 1998-007977/01.
                                                                                                        Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                    Synthetic.
Candida albicans.
                                                                                                                                                                                                                                                                              26-APR-1995;
                                                                                                                                                                                                                                                                                         20-MAY-1993;
                                                                                                                                                                                                 20-MAR-1998
                                                                                                                                                                                                                                                      US5688644-A
                                                                                                                                                                                                                                                                  18-NOV-1997
                                                                                                                                           13
                                                                                                                                                                                      AAT89976;
                                                                                                                                                              RESULT 973
                                                                                                                                                                    AAT89976
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New antisense oligonuclectides that target cytomegalovirus nucleic acid particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina.

    20
    *tag= a
    ncte= "contains phosphorothioate internucleotide"

                                                                                                                                                                                                                                                                                                                                   Antisense; oligonucleotide; immediate early; DNA polymerase; CMV; cytomegalovirus; inhibition; replication; sugar modification; phosphorothioate; infection; retinitis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag= b
/note= "all C bases are 5'-methyl-cytosine'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sugar moieties"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -methoxyethoxy sugar moieties"
Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chapman
                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= b
/note= "2'-methoxyethoxy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Anderson KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                    1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                      Anti-CMV oligonucleotide #15104.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 7; Page 32; 99pp; English.
                                                                                                       crecerretrearesarse 20
                                                                                                                                                                                                BP.
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                84.2%;
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                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     inkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15. .20
/*tag= 1
                                   16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .20
/*tag=
                                                                                                                                                                                                AAX17950 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Draper KG, Kisner DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1998-568330/48.
                                                                                                                                                                                                                                                                                                                                                                                                                              Human herpesvirus 5.
                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               modified base
                                                                                                                                                                                                                                                                  11-MAY-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                 AAX17950;
                                                                                                                                                               RESULT 974
                                   Matches
                                                                                                                                                                               AAX17950,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PCR primers AAT89973-T89976 and AAT89982 are used to amplify the ITS2 region of Candida albicans. This amplified region is used in a novel method for diagnosing systemic candidiasis and comprises hybridising DNA released from lysed Candida cells in a blood sample with a probe specific for the ITS2 region. Probes derived from this region can be used for krusei, C. parapsilosis or C. albicans in immunocompromised hosts. One candida cell per microlitre of blood can be detected
                                                                                                                                          region of Candida albicans. Primer AAT89974 is approximately 25bp from region of Candida albicans. Primer AAT89974 is approximately 25bp from the end of the 5.8S subunit. This amplified region is used in a novel method for diagnosing systemic candidasias and comprises hybridising DNA released from lysed Candida cells in a blood sample with a probe specific for the ITS2 region. Probes derived from this region can be used for krusei, C. parapsilosis or C. albicans in immunocompromised hosts. One candida cell per microlitre of blood can be detected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Diagnosis of systemic candidiasis by hybridisation assay - using probes specific for new or known Candida DNA sequences.
                                    Diagnosis of systemic candidiasis by hybridisation assay - using probes specific for new or known Candida DNA sequences.
                                                                                                                             PCR primers AAT89973-T89976 and AAT89982 are used to amplify the ITS2
                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ITS2 rDNA; systemic candidiasis; pathogen; diagnosis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                         0.8%; Score 14.2; DB 1; Length 20;
84.2%; Pred. No. 8.7e+02;
ative 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lott TJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zakroff S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP
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This antisense oligonucleotide is targeted to a nucleic acid sequence in the IB (immediate early) 2 region of the cytomegalovirus (GWV) genome and is able to inhibit CWV replication. Optionally the oligonucleotide include at least one 2'-(2-methoxyechoxy) sugar modification or phosphorothicate internucleotide linkages. The oligonucleotides (AAX17861 -X17924) are also used to inhibit CWV infections (by in vivo or in vitro contact with cells, tissues or body fluids), especially to treat or prevent CWV infections, particularly retinitis 0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02; BP; 0 A; 6 C; 4 G; 10 T; 0 U; 0 Other; Query Match Best Local Similarity Sequence 20

0.8%; Score 14.2; DB 1; Length 20;

Query Match

10017621-381.rng

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Local Similarity
nes 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                P-PSDB; AAY14610.
                                                                                                                                                                                                                                                                                                                                                             (GENE-) GENENA
                                                                                                                                                                                WO9934016-A2
                                                                                                                                                                                                                                                                                                                       16-OCT-1998;
                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                             28-DEC-1998;
                                                                                                                                                                                                                                                                                                     29-DEC-1997;
                                                                                                                                                                                                                      08-JUL-1999
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                                                                                   primer; ss.
                                                                                                                      Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                        Vider B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 977
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense oligonucleotides (AAX17861-X17924) are targeted to a nucleic acid (AAX17925-X17948) encoding IE (immediate early) 1 or 2, or DNA polymerase of cytomegalovirus (CWV) and are able to inhibit CMV replication. Optionally the oligonucleotides include at least one 2'-(2-methoxyethoxy) sugar modification or phosphorothioate internucleotide linkages. The oligonucleotides for inhibit CMV infections (by in vivo or in vitro contact with cells, tissues or body fluids), especially to treat or prevent CMV infections, particularly retinitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides that target cytomegalovirus nucleic acid particularly including 2-methoxyethoxy sugar modifications, especially for treating viral retinitis, with long-lasting retention in the retina.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
    Gaps
                                                                                                                                                                                                                                                                                                                                        Antisense; oligonucleotide; immediate early; DNA polymerase; CMV; cytomegalovirus; inhibition; replication; sugar modification;
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84.2%; Pred. No. 8.7e+02;
tive 0; Mismatches 3; Indels
  Indels
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                                                                                                                                                                                                                                                                                                                                                                                 phosphorothioate; infection; retinitis; ss.
0; Mismatches
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                                       131 GGATGAAGAAGATCAAACG 149
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                                                                          GCAAGAAGAAGAGCAAACG 2
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Conservative
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Best Local Similarity
' - hes 16; Conserve
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16;
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cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the pattern of expression of genes in a selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell; its genetic status, whether it carries a genetic defect, or whether it is transformed. They can be used for detecting a selected genetic defect in an individual, e.g. a fetus. They can also be used for determining the effect of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction correct family. Sequences AAZI7803-Z1842 repersent primers that can be used gene family. Sequences AAZI7803-Z1842 repersent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The
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Genetic proximity, gene expression, cell characterisation, homeobox gene; genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR; kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
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98IL-00126627.
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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (c) determining in the first cell and the second cell; (d) determining in a selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is transformed. They can be used for determining the origin of a selected treatment on a test cell. They can also be used for determining the effect of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction (RT-PCR) for determining the pattern of gene expression in a selected gene family. Sequences AA217803-218342 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The
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                            Homo sapiens.
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and a second cell comprises: (a) obtaining the first cell and the second
cell. (b) determining in the first cell and the second
cell; (b) determining in the first cell and the second
cell; (b) determining in the first cell and the pattern
of expression of genes in a selected gene family; and (c) calculating a
consimity index using a specified formula. The methods can be used for
characterising cells, e.g. for determining the origin of a cell, its
considered they can be used for detecting a selected genetic defect in
an individual, e.g. a fetus. They can also be used for determining the
ceffect of a selected treatment on a test cell. They can also be used for
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in the RT-PCR reactions to determine the pattern of gene expression. The
coperty man be selected from a set of homeobox genes, kinase genes,
copen family can be selected from a set of homeobox genes, kinase genes,
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kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-419113/35.
                                                                                                                                                                                                                                                                                                                                                                                                                    (GENE-) GENENA LID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P-PSDB; AAY14609
                                                                                                                  Homo sapiens.
                                                                                                                                                                   WO9934016-A2.
                                                                                                                                                                                                                                                                             28-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                16-OCT-1998;
                                                                                                                                                                                                                                                                                                                                      29-DEC-1997;
                                                                                                                                                                                                                         08-JUL-1999
                               primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ18077;
                                                                                   Synthetic
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Gaps

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3; Indels

RESULT 978 AAZ18077

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98WO-IL000625. 97IL-00122793. 98IL-00126627.

28-DEC-1998; 29-DEC-1997; 16-OCT-1998; (GENE-) GENENA LTD

Vider B;

Page 481

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cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the first cell and the pattern of expression of genes in a selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell; its genetic status, whether it carries a genetic defect, or whether it is transformed. They can be used for detecting a selected genetic defect in an individual, e.g. a fetus. They can also be used for determining the effect of a selected treatment on a test cell. They can also be used for obtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction property. The method uses reverse transcriptase polymerase chain reaction gene family. Sequences AAZ17803-Z1842 represent primers that can be used in the FTPCR reactions to determine the pattern of gene expression. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention provides a new method for identifying and characterising
                                                                                                                                                                                                                                                                                                                                                    Identifying and characterizing cells by comparing the pattern of gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene family can be selected from a set of homeobox genes, kinas
protein phosphatase genes, P450 enzyme genes, steroid receptor
superfamily genes or cadherin superfamily genes
                                                                                                                                                                                                                                                                                                                                                                          expression in a selected gene family.
                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 4; Page 47; 102pp; English.
                                                                                    98WO-IL000625
                                                                                                                               97IL-00122793
                                                                                                                                                  98IL-00126627
                                                                                                                                                                                                                                                                                    WPI; 1999-419113/35.
P-PSDB; AAY14728.
                                                                                                                                                                                               (GENE-) GENENA LID
                                                                                    28-DEC-1998;
WO9934016-A2
                                                                                                                                                  16-0CT-1998;
                                         08-JUL-1999
                                                                                                                                                                                                                                           Vider B;
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Gaps ; 0 0.8%; Score 14.2; DB 1; Length 20; 14.2%; Pred. No. 8.7e+02; ve 0; Mismatches 3; Indels Sequence 20 BP; 5 A; 9 C; 4 G; 2 T; 0 U; 0 Other; 84.2%; Conservative Best Local Similarity Matches 16; Conser Query Match

0;

kinase genes,

971 TACACCGAGACCTCAAGCC 989 2 recacededecergaagec 20 à

AAZ18198 standard; DNA; 20 BP 11-OCT-1999 (first entry) AAZ18198, 

Serine threonine kinase gene specific primer 245.

Genetic proximity, gene expression, cell characterisation, homeobox gene; genetic defect, reverse transcriptase polymerase chain reaction, RT-PCR, kinase gene; protein phosphatase; P450; steroid receptor; cadherin; primer; ss

Homo sapiens Synthetic

WO9934016-A2

08-JUL-1999

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The invention provides a new method for identifying and characterising cells. The method for determining the genetic proximity of a first cell and a second cell comprises: (a) obtaining the first cell and the second cell; (b) determining in the first cell and the second cell; (b) determining in the second cell the pattern of expression of genes in a selected gene family; and (c) calculating a proximity index using a specified formula. The methods can be used for characterising cells, e.g. for determining the origin of a cell, its genetic status, whether it carries a genetic defect, or whether it is transformed. They can be used for detecting a selected genetic defect in an individual, e.g. a fetus. They can also be used for checkining cells capable of expressing an homeobox related desired cobtaining cells capable of expressing an homeobox related desired property. The method uses reverse transcriptase polymerase chain reaction companies family. Sequences Ad217803-Z13842 represent primers that can be used in the RT-PCR reactions to determine the pattern of gene expression. The gene family can be selected from a set of homeobox genes, kinase genes, and the control of the co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                protein phosphatase genes, P450 enzyme genes, steroid receptor superfamily genes or cadherin superfamily genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                       expression in a selected gene family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 4; Page 47; 102pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               971 TACACCGAGACCTCAAGCC 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 TCCACCGAGATCTCAAGTC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16; Conservative
                                                                                                                                                                                                                                                                                                               WPI; 1999-419113/35.
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                                                                                                                                                                                                                                                                                                                                               P-PSDB; AAY14732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
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AAV70875/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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AAV70875 standard; DNA; 20 BP. (first entry) 26-FEB-1999 AAV70875; 

PCR primer ITS3 for ITS2 region and adjacent regions.

Internal transcribed spacer 2; ITS2; probe; Aspergillus flavus; A. niger; A. terreus; A. nidulans; Rusarium solani; F. moniliforme; Mucor rouxii; M. racemosus; M. plumbeus; M. indicus; A. fumigatus; M. microsus; M. oricinilloides f. circinelloides; Rhizopus oryzae; R. microsporus; K. circinelloifer; Rhizomucor pusillus; Absidia corymbifera; Cunninghamella elegans; Pseudallesheria boydii; Scedosporium apiospermum; Penicillium notatum; Sporothrix schenkii; filamentous fungus; PCR primer;

Synthetic.

WO9850584-A2

12-NOV-1998

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promoting the growth and the growth differentiation of a megakaryocyte.
                                                                                                                                                                                           19 AGTCCACAGCAGGCAGCAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97FR-00015041.
97FR-00016034.
98US-0107077P.
                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98WO-IB001939.
                                                                                                                                Query Match
Best Local Similarity 84.2%;
                                                                                                                                                                                                                                                             AAZ03102 standard; DNA; 20
                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                        16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                             Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-371125/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GEST ) GENSET
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-DEC-1997;
04-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Griffais R;
                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                     AAZ03102;
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                                                                                                                                                         Matches
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                                                                                                                                                                                                                                                               FXSXSSSXS
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                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                            PCR primers AAV70875-76 and AAV83709 were used to amplify internal transcribed spacer 2 (ITS2) and adjacent regions of various filamentous thurgi. Probes can be derived from the amplified sequence (see AAV70845-73) which are species-specific, and can be used for identifying a species selected from Aspergillus flavus, A. fumigatus, A. niger, A. terreus, A. nidulans, Fusarium solani, F. moniliforme, Mucor rouxii, M. racemosus, M. plumbeus, M. indicus, M. circinilloides f. circinelloides finizopus oryzae, R. microsporus, R. circinals, R. stolonifer, Rhizomucor pusillus, Absidia corymbifera, Cunninghamella elegans, Pseudallesheria boydii (teleomorph of Scedosporium apiospermum), Penicillium notatum, or Sporothrix schenkii. The probes can be used for differentiating filamentous fungal species from each other and from other medically
                                                                                                                                New nucleic acid probes for filamentous fungi – for detecting e.g. Aspergillus, Fusarium, Mucor, Rhizopus, Rhizomucor, Absidia, Cunninghamella, Pseudoallescheria boydii, Penicillium and Sporothrix
                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCR primer 2S used to amplify DNA encoding a thrombopoietin protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cat; thrombopoietin; growth; growth differentiation; megakaryocyte;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New gene and protein having of cat thrombopoietin activity - for
                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                      0.8%; Score 14.2; DB 1; Length 20;
84.2%; Pred. No. 8.7e+02;
Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                    Choi JS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (NISK ) NIPPON SEIBUTSU KAGAKU KENKYUSHO ZH.
                                                             (USSH ) US DEPT HEALTH & HUMAN SERVICES
                                                                                    Morrison CJ, Reiss E, Aidorevich L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                           Example 1; Page 8; 45pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
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              98WO-US008926
                                      97US-0045400P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX26351 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (revised)
(first entry)
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Best Local Similarity 84.2
Matches 16; Conservative
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                                                                                                          WPI; 1999-034737/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                           important fungi
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-AUG-1997;
              01-MAY-1998;
                                      02-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Felis catus.
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25-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-MAR-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX26351;
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                                                                                                                                                                      species
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                                                                The present sequence represents a PCR primer used to amplify nucleic acid encoding a cat protein having thrombopoietin activity. The protein promotes the growth and the growth differentiation of megakaryocytes. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Vaccine; eye disease; conventional trachoma; nonendemic trachoma; paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis; nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer; bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       primer used to amplify an ORF of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 1 A; 6 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                Score 14.2; DB 1;
Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genome sequence of Chlamydia trachomatis.
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Example 1; Page 4; 13pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1626 AGGCCCCAGCAGCAGCGG 1644
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Vaccine; eye disease; conventional trachoma; nonendemic trachoma; paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis; nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer; bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Vaccine, eye disease, conventional trachoma, nonendemic trachoma, paratrachoma, inclusion conjunctivitis, genital disease, perihepatitis, nongonococcal uretritis, epidymitis, cervicitis, salpingitis, PCR primer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCR primers AA201426-Z06209 were used to amplify open reading frames (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AAX36754-Y37949) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal uretritis, epidymitis, cervicitis, salpingthis, perihepatitis, bartholinitis, pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the polypeptides of the invention may be of use in treating these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.2; DB 1; Length 20;
34.2%; Pred. No. 8.7e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                            PCR primer used to amplify an ORF of Chlamydia trachomatis.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genome sequence of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 1642; 1755pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCAAGCATCCTATCAAAC 19
                     BP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97FR-00016034.
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                   AAZ03873 standard; DNA; 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                    (first entry)
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                                                                                                                                                                                                                                                                                                                  Chlamydia trachomatis.
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                                                                                                                                                                                                                                                                                                                                                           409928475-A2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-DEC-1997;
                                                                                                    07-0CT-1999
                                                                                                                                                                                                                                                                                                                                                                                                     10-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Griffais R;
                                                                                                                                                                                                                                                                                              Synthetic.
                                                             AAZ03873;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ04109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ04109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                        paratrachoma, inclusion conjunctivitis, genital disease, perihepatitis, nongonococcal uretritis, epidymitis, cervicitis, salpingitis, PCR primer, bartholinitis, pneumopathy; venereal lymphogranulomatosis, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primers AAZ01426-Z06209 were used to amplify open reading frames (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AAY36734-Y37949) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal uretritis, practicis, cervicitis, salpingitis, perihapatitis, baracholinitis; pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                      conventional trachoma; nonendemic trachoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
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84.2%; Pred. No. 8.7e+02;
rative 0; Mismatches 3; Indels
               Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                               PCR primer used to amplify an ORF of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genome sequence of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 1742; 1755pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1477 CGGATCCACAAACTTCCTG 1495
                                                                                                      535 AGCCCCATCTTTGACAAGC 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 cedarccaraaacercare 2
                                                                                                                                            AGCGTCATCTTTGAGAGC 1
                                                                                                                                                                                                                                                     BP
                   0.8%;
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                                                                                                                                                                                                                                                     standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                         Vaccine; eye disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chlamydia trachomatis.
Query Match
Best Local Similarity
Thes 16; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-371125/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             W09928475-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-DEC-1997;
04-NOV-1998;
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                                                                                                                                                                                                                                                                                                                                        07-OCT-1999
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10-JUN-1999

Synthetic

AAZ05087;

AAZ05087

RESULT 984

AAZ05087

19

à qq Griffais R;

Query Match

Matches

RESULT 985

AAZ03873

diseases

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Gaps

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Synthetic

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This primer was used to amplify a region of the 5.83 rRNA, the Internal Transcribed Spacer or ITS sequence. This region is highly conserved between species. The Internal Transcribed Spacer (ITS) sequences can be isolated from the ribosomal RNA gene region of fungal pathogens, such as Pyrenophora tritici-repentis. The ITS can then be probed for by a sequence with at least In Contiguous mucleotides in homology with the ITS. This provides a method for detecting fungal pathogens of crops, such as wheat and maize, the sensitivity of this method allows differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This primer was used to amplify a region of the 5.8S rRNA, the Internal Transcribed Spacer or ITS sequence. This region is highly conserved between species. The Internal Transcribed Spacer (ITS) sequences can be isolated from the ribosomal RNA gene region of fungal pathogens, such as Pyrenophora tritici-repentis. The ITS can then be probed for by a sequence with at least 10 contiguous nucleotides in homology with the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ribosomal RNA; fungal pathogen; PCR; crop protection; ss.
                                                                                                                       New internal transcribed spacer DNA from fungal pathogens, used as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New internal transcribed spacer DNA from fungal pathogens, used as sources of primers and probes for pathogen detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.8%; Score 14.2; DB 1; Length 20; 34.2%; Pred. No. 8.7e+02; ive 0; Mismatches 3; Indels
                                                                                                                                            sources of primers and probes for pathogen detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
(NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (NOVS ) NOVARTIS AG.
(NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
                                                                                                                                                                                                                                                                                                                                                                                        between members of the species or genus
                                                                                                                                                                                    Example 6; Page 18; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               internal transcribed spacer; ITS; primer; detection; plant disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 6; Page 18; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            84.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Oligonucleotide primer ITS3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 84.2 es 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-527487/44.
                                                                            WPI; 1999-527487/44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ06549 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9942609-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ06549;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                        Beck JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Beck JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ06549/c
    g
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal uretritis, epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis, pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      These ORFs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR primers AAZ01426-Z06209 were used to amplify open reading frames (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AAX36754-Y37949) which can be used as vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 internal transcribed spacer; ITS; ribosomal RNA; fungal pathogen; PCR; primer; detection; plant disease; crop protection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The polypeptides of the invention may be of use in treating these diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
0
bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                   Genome sequence of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 1661; 1755pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        863 TGAAGCAGTACCTGGATGA 881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              regagcagrarcregaega 19
                                                                                                                                                                                                                        97FR-00015041.
97FR-00016034.
98US-0107077P.
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                                                                                                                                                                                    98WO-IB001939,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 84.2
Matches 16; Conservative
                                                           Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-371125/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (NOVS ) NOVARTIS AG
                                                                                                                                                                                                                                                                                                         (GEST ) GENSET
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-FEB-1998;
                                                                                                 W09928475-A2
                                                                                                                                                                                    27-NOV-1998;
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                                                                                                                                            10-JUN-1999
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                                                                                                                                                                                                                                                                                                                                                  Griffais R;
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Query Match

RESULT 987

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Synthetic.

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Gaps

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New compositions comprising sensor arrays made up of unique probe oligonucleotides - useful for characterizing a sample of target deletion oligonucleotides.
                                                                                   Deletion sequence oligomucleotide; sensor array; eukaryotic pathogen; probe; cellular adhesion modulator; cellular proliferation modulator; human retrovirus; human immunodeficiency virus; non-human retrovirus;
                                                              Deletion sequence oligonucleotide 15.
                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 94; 163pp; English.
                                                                                                                                                                                                                               98WO-US018084.
                                                                                                                                                                                                                                                         97US-00923771.
                                     (first entry)
                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                           Srivatsa GS;
                                                                                                                                                                                                                                                                                                                                 WPI; 1999-205198/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                             HIV; primer; ss.
                                                                                                                                                                              WO9911820-A1
                                                                                                                                                                                                                               01-SEP-1998;
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                                      18-JUN-1999
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                                                                                                                                                     Synthetic.
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              AAX23562;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequence is a PCR primer used with primer tpric (AAX89550) to amplify genomic DNA from a human chromosome 5 deletion panel. The primer is based on positions 810 to 829 of the 3' untranslated region of tpri (AAX89545). The amplified fragment of tpri is used in the construction of plasmid vectors. tpri and tpr2 are novel tetratricopeptide repeat (TPR)-containing genes. It has been suggested that the product of the tpri gene (AAX28466) and tpr2 gene (AAX28467) may be targeted to an abnormality of protein foliding. Although the genes tpr1 and tpr2 both encode TPR elements they are otherwise unrelated
ITS. This provides a method for detecting fungal pathogens of crops, such as wheat and maize, the sensitivity of this method allows differentiation
                                                                                                                                                                                                                                                                                                                      PCR primer tprb; tpr1; TPR; tetratricopeptide repeat-containing protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Polypeptides comprising novel tetratricopeptide repeat containing genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                    Gaps
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                                                                          0.8%; Score 14.2; DB 1; Length 20;
84.2%; Pred. No. 8.7e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                                                              PCR primer tprb for amplification of a tpr1 fragment.
                                                  Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
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           as wheat and maize, the sensitivity of t
between members of the species or genus
                                                                                                                            1549 CTTCGGTCTTCGTCGATGC 1567
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example; Col 28; 34pp; English.
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                                                                                                                                                                                                                   BP.
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                                                                                                                                                                                                                  AAX89549 standard; cDNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX23562 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GEHO ) GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                   12-OCT-1999 (first entry)
                                                                        Query Match 0.8'
Best Local Similarity 84.2'
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Murthy AE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-457606/38
                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                           Synthetic.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gusella JF,
                                                                                                                                                                                                                                                                                                                                                                                                 US5935851-A
                                                                                                                                                                                                                                                                                                                                                                                                                         10-AUG-1999
                                                                                                                                                                                                                                           AAX89549;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                          RESULT 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 990
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                                                                                                                                                                                                         AAX89549
                                                                                                                                                                                                                   a
88888
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This invention describes a novel composition comprising a number of sensor arrays, where each array comprises a unique probe oligonucleotide, which is the reverse complement of part of a unique trarget onligonucleotide present in a mixture of target deletion sequence oligonucleotides. The compositions form a method for characterizing a sample of target deletion oligonucleotides with the probe oligonucleotides of the sensor arrays. Such oligonucleotides and their targets are represented in AAX3548-X23709. Oligonucleotides characterized by the method form pharmaceutical compositions that are useful for modulating cellular adhesion or proliferation, and being active against a eukaryotic pathogen, a human retrovirus, a human immunodeficiency virus (HIV), or a non-human retrovirus, including influenza virus, Epstein-Barr virus, Respiratory Syncytial Virus or cytomegalovirus (CMV). The compositions enable characterization of deletion sequence oligonucleotides having related, but different nucleobase sequences, and quantification of different species of deletion sequence ("trarget") oligonucleotides in a mixture.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Also, if the specificity of the oligonuclectide's nucleobase sequence for its reverse complement is not modified, the method may be performed using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0.8%; Score 14.2; DB 1; Length 20; 34.2%; Pred. No. 8.7e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 0 A; 5 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  130 CGGATGAAGAAGATCAAAC 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              84.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX96453 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-SEP-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16; Conservative
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Barr BC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CIGCGIICIICAICGAIGC 1
            97US-00903446.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-US005754.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ22586 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-DEC-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (REGC ) UNIV CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conrad PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-571872/48.
                                                                                               WPI; 1999-153818/13
                                                                     Elie CM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Neospora caninum.
            30-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-MAR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAZ22586;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                     Lott TJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ22586
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                                                                                                                                                                                                                                                                                                                                                                                                                   AAX91991-X97517 represent PCR primers used to amplify open reading frames and other nucleic acid sequences from the genome of Chlamydia pneumoniae (see AAX91990). C. pneumoniae causes respiratory disease such as pneumonia and bronchitis and is thought to be a contributing factor in heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema nodosum or pharyagitis. The polypeptides encoded by the open reading frames of the C. pneumoniae genome (see AAX34584- AAX35879) can be used in immunogenic compositions as vaccines. Vectors containing C. pneumoniae nucleotides sequences can also be used as immunogenic compositions.
                                    Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis; sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine; neutralising epitope; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Internal transcribed spacer region 2; ITS2; probe; Candida detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   especially where the vector directs the expression of a neutralising epitope of C. pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.2; DB 1; Length 20; 34.2%; Pred. No. 8.7e+02;
            primer used to amplify an ORF of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Primer for Candida Internal transcribed spacer region 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                              sequence of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                           Page 1827; Disclosure; 1912pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       291 TCGTTCTGCACGGGCCCA 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         infection; diagnosis; probe; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 redriciecacaca 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX27102 standard; DNA; 20 BP.
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                                                                                                                                                                                                   98WO-IB001890
                                                                                                                                                                                                                                97FR-00014673
                                                                                                                                                                                                                                              98US-0107078P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           84.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 16; Conservative
                                                                                                             Chlamydophila pneumoniae
                                                                                                                                                                                                                                                                                                                                 WPI; 1999-357842/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                         (GEST ) GENSET
                                                                                                                                           WO9927105-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JUL-1998;
                                                                                                                                                                                                   20-NOV-1998;
                                                                                                                                                                                                                                21-NOV-1997;
                                                                                                                                                                                                                                              04-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9906596-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-MAY-1999
                                                                                                                                                                       03-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-FEB-1999
                                                                                                                                                                                                                                                                                                     Griffais R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Candida sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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            PCR
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AAX273

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This sequence is a primer for a Candida internal transcribed spacer region 2 (ITS2) sequence. The invention relates to a nucleic acid probe for a Candida species that selectively hybridises with a nucleic acid molecule encoding a portion of the ITS2, or a complementary sequence of Candida species selected from Candida guilliermondii, C. haemulonii, C. kefyr, C. lambica, C. lusitaniae, C. norvegensis, C. norvegica, C. rugosa, C. utilis, C. vimanathii, C. zeylanoides, C. dubliniensis, and C. pelliculosa. The nucleic probes can be used to detect, identify and distinguish or differentiate between Candida species in a sample or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               specimen with high sensitivity and specificity. The probes can be used to detect the presence of Candida in the sample, diagnose infection with the detect the presence of Candida in the sample, or monitor the progress of therapies used to treat the infection. They can also be used to study the organisms and related diseases and to guide therapies and treatments for the diseases
                                                                                                                                                                                                                                                                                      New nucleic acid probes for Candida species - comprises a sequence which hybridises with a nucleic acid molecule encoding a portion of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Internal transcribed region, ITS1, nuclear small subunit; nss; vaccine; horse; equine protozoal myeloencephalitis; EPM; diagnosis; therapeutic agent; prophylactic agent; parasite; cyst; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 14.2; DB 1; Length 20; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
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(USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                         internal transcribed spacer 2 region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Page 12; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                   Morrison CJ,
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invention relates to antisense oligonucleotides that detect and

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PCR primers AAZ22885-Z2286 are used to amplify the internal transcribed spacer region (ITS1) of the nuclear small subunit (nss) of Neospora caninum isolates (OH) and BPAH:AAZ2284). The invention relates to a biologically pure culture of equine Neospora, and the PCR product is used in the identification of the culture. Immunogens (optionally expressed in the identification of Neospora are used in vaccines for the treatment or prevention of Neospora are used in vaccines for the treatment or prevention of Neospora infection in horses and other animals. Neospora is a causative agent of equine protozoal myeloencephalitis (BPM). Detection of Neospora specific antigens, antibodes or nucleic acid (by usual immunosassy or hybridization tests) is used to diagnose infection. Antibodies specific for equine Neospora are used for diagnose infection. Antibodies specific for equine Neospora are used for diagnose infection. Antibodies specific for equine Neospora are used for diagnose infection. Antibodies specific for equine Neospora and Schenbylactic agents. Reagents specific for equine Neospora allow differentiation between equine protozoal myeloencephalitis caused by Neospora and Sarcocystis neurona. These pathogens require different treatments and treatment of Neospora is only effective if applied before the parasite has formed oysts. The vaccines also prevent shedding of cocysts by animals known to be infected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1; JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe; rat; hyperproliferative; stress-activated protein kinase; p54; SAP; ss.
Biologically pure culture of equine Neospora, used as source of vaccines and diagnostic reagents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.2; DB 1; Length 20; 14.2%; Pred. No. 8.7e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rat JNK1-specific oligo ISIS No: 21867.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1549 CTTCGGTCTTCGTCGATGC 1567
                                                            Example 3; Page 35; 47pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGCGTTCTTCATCGATGC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX29421 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98WO-US016488
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-JUN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 84.2'
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
Rattus norvegicus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-AUG-1997;
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New antisense oligonucleotides that detect and modulate the expression of

Gaarde WA;

Nero PS,

Dean N, Monia BP,

Mckay R,

WPI; 1999-181060/15.

(ISIS-) ISIS PHARM INC.

Jun N-terminal kinase proteins - useful for treating hyperproliferative diseases and inhibiting tumor growth in animals, and for modulating protein phosphorylation by these proteins.

Example 7; Page 114; 190pp; English

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense compounds targeting nucleic acids encoding human PI3 kinase pI10 delta useful for treating a disease or condition associated with PI3 kinase pI10 delta expression, e.g. rheumatoid arthritis, asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mod_base= OTHER
/note= "Optionally 2'-methoxyethyl (2'-MOE) nucleotides"
16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "Optionally 2'-methoxyethyl (2'-MOE) nucleotides"
                      modulate the expression of Jun N-terminal kinase (JMK) proteins. The oligonucleotides specifically hybridize to a nucleic acid encoding a proteins. The Signaucleotides are useful for modulate expression of these proteins. The oligonucleotides are useful for modulating JMK protein expression and cell cycle progression in cultured cells or animal cells. The oligonucleotides are also useful for modulating the phosphorylation of a protein that has been phosphorylated by a JMK protein, and the expression of a cellular protein that promotes one or more metastatic events. The oligonucleotides also form pharmaceutical compositions for treating animals with a hyperproliferative disease, and for inhibiting tumor growth in an animal. The invention also provides sequences that caspecifically hybridise to nucleic acids encoding rat stress activated protein kinase (SAP) or p54, a homologue of human JMK protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Phosphatidyl inositol 3 kinase; PI3K; antisense oligonucleotide; pl10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           catalytic subunit; treatment; rheumatoid arthritis; asthma; research; diagnostic; infection; inflammation; tumour formation; inhibitor; ss.
                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag= a
/note= "Phosphorothioate internucleoside linkage"
                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                0.8%; Score 14.2; DB 1; Length 20; 34.2%; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PI3K antisense inhibitor oligonucleotide ISIS# 32141.
                                                                                                                                                                                                                                                                 Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                     1424 GGATCTCCGCAGAGGATGC 1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag= c
/mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                     GGATCTCCGTAGACGAAGC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
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                                                                                                                                                                                                                                                                                                                  Best Local Similarity 84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAA13128 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
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                                                                                                                                                                                                                                                                                                                                   16; Conservative
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/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-282691/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modified base
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-JUL-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                      20
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                                                                                                                                                                                                                                                                                                  Query Match
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                                                                                                                                                                                                                                                                                                                                   Matches
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Cafferkey
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                                                                                                                                                               595 GGCTTTGGGAAACTGGAGA 613
                                                                                                                                                                                           19 GGATTAGGGAAACTGAAGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 GACCCTGAGTTCAAAGCCA 1
                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                  human; Proll5; PCR primer; ss.
                                                                                                      0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US024331.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0104737P
                                                                                                                                                                                                                                                                   20
                                                                                             Query Match
Best Local Similarity 84.2<sup>3</sup>
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                            (first entry)
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                                                                                                                                                                                                                                                                  AAZ95024 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Salceda S, Recipon H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (DIAD-) DIADEXUS LLC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-339531/29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200023111-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                            15-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-0CT-1998;
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                                                                                                                                                                                                                                                                                                AAZ95024;
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                                                                                                                                                                                                                                         RESULT 997
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Matches
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8886666
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                                    This sequence represents a phosphatidyl inositol 3 kinase (PI3K)

targeting antisense oligonucleotide. Phosphatidyl inositol 3 kinases act

cas downstream effectors of hormone and growth factor receptors, and have

been implicated in growth factor mediated cell transformation,

mitogenesis, protein trafficking, cell survival and proliferation, and

mitogenesis, protein trafficking, cell survival and proliferation, and

can any other cellular activities. PI3K is a heterodimer, consisting of a

consisting to antisense oligonucleotides which target the pilo

continuation relates to antisense oligonucleotides specifically hybridise

continuation of PI3K. The antisense oligonucleotides may be used to treat

continuation of PI3K. The antisense oligonucleotides may be used to treat

an animal, particularly human, suspected of having or being prone to a

disease or condition associated with the expression of PI3K. The

condulation (preferably inhibition) of the expression of PI3K. The

modulation (preferably inhibition) of the expression of PI3K. The

confisense oligonucleotides may also be used for research and diagnostics,

in pharmaceutical compositions and formulations, in the preparation of

kits for detecting the level of PI3K in a sample, and as prophylaxis,

confisense oligonucleotides, which are able to inhibit gene expression

confisense oligonucleotides, which are able to inhibit gene expression

specifically, are used to elucidate the function of particular genes, and

confisense oligonucleotides, which are able to inhibit gene expression

confisense oligonucleotides, which are able to inhibit gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to polynucleotides encoding a new collectin of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New collectin of human origin having antibacterial and antiviral activity, and gene encoding it useful for production of transgenic animals and of antibodies for screening potential drug molecules.
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Collectin; human; antibacterial; antiviral; PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                   BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human collectin sequencing primer TGP1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 4; Page 36; 106pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1231 CAGCTACACTTCATCTTCC 1249
               Claim 16; Col 41; 35pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19 CTGCTAGACTTCAGCTTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA07709 standard; DNA; 20 BP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
nes 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
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human origin. The collectin can be used as an antibacterial and antiviral agent and for screening potential drug molecules. The new collectin can be produced by standard recombinant methodology. Sequences AAA07708-11 represents PCR primers for cap site sequencing of human collectin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence is that of the forward primer used in the real-time quantitative PCR amplification of cancer specific gene Prol15 (see AAZ95004 and AAZ95005). Overexpression of Prol15 was found in 3 of 4 primary prostate cancer samples examined, indicative of it being a diagnostic marker for prostate cancer. The invention provides ESTs and ALII-length contigs for CSGs (see AAZ94998-23517). The CSGs, polypeptides encoded by them, and antibodies that specifically bind CSG are used in claimed methods for detecting, diagnosing, monitoring,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Diagnosing, staging and monitoring the presence and metastases of prostate cancer especially useful for treating prostate cancer comprises measuring changes in cancer specific gene levels.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Prostate cancer; cancer specific gene; CSG; expressed sequence tag; EST; diagnosis; monitoring; staging; imaging; therapy; metastasis; marker;
                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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84.2%; Pred. No. 8.7e+02;
iive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                     3; Indels
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                                                                                                                                                                                                                  Sequence 20 BP; 3 A; 8 C; 1 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                   Score 14.2; DB 1;
Pred. No. 8.7e+02;
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                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
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AAZ72227 standard; DNA; 20 BP.

RESULT 999

AAZ72227

AAZ72227;

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monoclonal antibodies directed against TAG-72, designated colon cancer (CC) antibodies. The Cantibodies are produced from the rearrangement of WhalphaTAG (AAZ40711). The antibodies are produced from the rearrangement of WhalphaTAG (AAZ40701). The antibodies are used in the invention which calates to a new anti-tumour associated sialylated glycoprotein antigen (TAG)-72 mouse-human chimeric antibody. The variable region of the antibody has a heavy chain (WH) where VH is encoded by a DNA sequence contibody has a heavy carcinoma targeting through the administration to an animal of an anti-TAG-72 mouse-human chimeric antibody produced by specific cell lines. The antibody or a fragment are conjugated to an imaging marker or therapeutic agent, in a pharmaceutically acceptable, contoxic, sterile carrier. The chimeric antibody binds to TAG-72 which is found on certain human tumour cells. The tissue regions containing the therapeutic agents. The method is useful for in vivo diagnosis and the therapeutic agents. The method is useful for in vivo diagnosis and composition for the in situ detection of carcinoma lesions. The method is useful for intraoperative therapy, consisting of locating the position of a tumour through the administration of the antibody, followed by
                                                                                                                                                           VHalphaTAG; anti-tumour associated sialylated glycoprotein antigen;
TAG-72; variable region; heavy chain; carcinoma; detect; tumour; ss;
mouse-human chimeric antibody; therapeutic agent; intraoperative therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New mouse-human chimeric antibody, useful for in vivo diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Anderson WHK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02; ive 0; Mismatches 3; Indels
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                                                                                                                           Primer for sequencing antibody CC92 heavy chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kaplan DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Schlom J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example; Col 34; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                88US-00259943.
88US-00261942.
89US-00424362.
93US-00040687.
                  AAZ40718 standard; DNA; 20 BP.
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                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gourlie BB,
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                                                                                                                                                                                                                                                                                                                                                                                  24-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                   19-OCT-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                    24-OCT-1988;
19-OCT-1989;
                                                                                       21-FEB-2000
                                                                                                                                                                                                                                                                                                           US5993813-A.
                                                                                                                                                                                                                                                                                                                                            30-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mezes PS,
Rixon MW;
                                                                                                                                                                                                                                                    Synthetic.
                                                      AAZ40718;
                                                                                                                                                                                                                     primer.
                                                                                                                                                                                                                                                                         Mus sp.
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AAZ40718/
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of

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AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nuclectide sequences. AAZ69579 to AAZ77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies the human genome and in complex association studies and haplotyping studies. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents acting on a disease as well as the characterisation of the differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and a research invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                  Human biallelic marker upstream amplification primer SEQ ID NO:6583.
                                                                                                                 Human genome; biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; gentotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
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Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chumakov 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 9; Page 1634; 2745pp; English.
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98US-0109732P.
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                                               (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cohen D, Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                map of the human genome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-013267/01.
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Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                         (GEST ) GENSET
                                                                                                                                                                                            diagnosis; ss
                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                              WO9954500-A2
                                                                                                                                                                                                                                                                                                                                   21-APR-1999;
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                                                 .0-SEP-2001
                                                                                                                                                                                                                                                                                                 28-OCT-1999
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Gaps

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1293 GTCCAACGAGGAGTTCAAG 1311

16; Conservative

Matches

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Best Local Similarity

Query Match

20 GTACAATGAGAAGTTCAAG 2

Mezes PS;

Wus sp.

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The present invention describes an antibody (I) produced by one of the following cell lines: CH44-1 (ATCC HB9884); CH44-2 (ATCC HB9881); CH44-4 (ATCC HB9877); CH88-1 (ATCC HB9873); CH88-3 (ATCC HB9877); CH88-4 (ATCC HB9878); CH88-2 (ATCC HB9878); CH88-3 (ATCC HB9878); CH84-2 (ATCC HB9878); CH84-2 (ATCC HB9878); CH84-3 (ATCC HB9878); and CH84-4 (ATCC HB9875), capable of binding to tummour-associated sialylated glycoprotein (TAG)-72 with an affinity at least 25% greater than BT2.3. (I) can be used for treating and diagnosing cancer, and for the in stru detection of carcinoma lesions and for in vivo therapy. AAA29682 to AAA29744, and AAY90714 to AAY90723, represent
                                                                                                                                                                                                                                                                                                                                Novel family of chimeric antibodies for treating cancer with high affinities to a high molecular weight tumor-associated sialylated glycoprotein antigen of human origin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Japanese citrus viroid 2, JCVd2, citrus viroid-I-LSS, detection, infection, citrus tree, Citrus medica, reverse transcription-PCR, RT-PCR primer, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 8.7e+02;
                                                                                                                                                                                                                            Schlom J, Gourlie BB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Japanese citrus viroid 2 gene PCR primer CB2-TM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (NORQ ) NORINSUISANSHO KAJU SHIKENBACHO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1293 GTCCAACGAGGAGTTCAAG 1311
                                                                                                                                                                                                                                                                                                                                                                                                                  Example; Col 37; 122pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 GTACAATGAGAAGTICAAG 2
                                                                                               88US-00259943.
88US-00261942.
89US-00424362.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Japanese citrus viroid 2 gene.
                                                          93US-00040687.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98JP-00349472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
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                                                                                                                                                                                                                            Kaplan DA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA72056 standard; DNA;
                                                                                                                                                                                                                                                                                         WPI; 2000-349294/30.
                                                                                                                                                                                   (DOWC ) DOW CHEM CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 citrus viroid-I-LSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-492947/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JP2000166567-A.
                                                                                                                                                                                                                            Anderson WHK,
                                                          31-MAR-1993;
                                                                                                   19-0CT-1988;
                                                                                                                      24-0CT-1988;
19-0CT-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-DEC-1998;
                   18-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-JUN-2000
                                                                                                                                                                                                                                                  Rixon MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA72056;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes an antibody (I) produced by one of the following cell lines: CH44-1 (ATCC HB9884); CH44-2 (ATCC HB9887); CH88-1 (ATCC HB9887); CH88-2 (ATCC HB9881); CH88-3 (ATCC HB9877); CH88-1 (ATCC HB9873); CH88-2 (ATCC HB9873); CH84-2 (ATCC HB9873); CH84-3 (ATCC HB9878); and CH84-4 (ATCC HB9875), capable of binding to tumour—associated stalylated glycoprotein (TAG1-72 with an affinity at least 25% greater than BP2.3. (I) can be used for treating and diagnosing cancer, and for the in situ detection of carcinoma lesions and for in vivo therapy. AAA29682 to AAA29744, and AAV90714 to AAY90723, represent sequences used in the exemplification of the present invention
                                                 Chimeric antibody, VHalphaTAG; TAG-72; human; mouse; diagnosis; tumour-associated sialylated glycoprotein antigen; cytostatic; carcinoma; cancer; detection; therapy; primer; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chimeric antibody, VHalphaTAG; TAG-72; human; mouse; diagnosis; tumour-associated sialylated glycoprotein antigen; cytostatic; carcinoma; cancer; detection; therapy; primer; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel family of chimeric antibodies for treating cancer with high affinities to a high molecular weight tumor-associated sialylated glycoprotein antigen of human origin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gourlie BB, Mezes PS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.8%; Score 14.2; DB 1; Length 20; 34.2%; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Indels
                   CC92 heavy chain oligonucleotide primer SEQ ID NO:24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WHalphaTAG oligonucleotide primer SEQ ID NO:44.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Anderson WHK, Kaplan DA, Schlom J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1293 GTCCAACGAGGAGTTCAAG 1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example, Col 34; 122pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      N
                                                                                                                                                                                                                                                                                                                             88US-00259943.
88US-00261942.
89US-00424362.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                         93US-00040687.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTACAATGAGAAGTTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA29714 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-AUG-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-349294/30.
                                                                                                                                                                                                                                                                                                                                                                                                                (DOWC ) DOW CHEM CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                19-OCT-1988;
24-OCT-1988;
19-OCT-1989;
                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                         31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                         US6051225-A.
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Rixon MW.

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g à

RESULT 1001

Mus sp.

AAA29714/7 ID AAA22 AC AAA22 AC AAA22 XX I4-AI XX Chim KW Ch

Query Match

Matches

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Gaps

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3; Indels

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Example 2; Page 5; 15pp; Japanese.
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The invention relates to a gene (AAA72051) from Japanese citrus viroid 2 (JCVG2, citrus viroid-I-LSS). The invention also encompasses the CDNA (AAA72052) of this gene, variants of the gene, primers (AAA72053-A72054) and probes specific for the gene, and a method for the detection of the gene. The JCVG2 RNA was isolated from the leaves and bark of infected Citrus medica trees. Probes of the invention may be used to detect citrus seedlings. Sequences AAA72053-A72057 represent reverse transcription PCR (RI-PCR) primers for the amplification of the JCVG2 gene or its fragments. Sequences AAA72055 and AAA72056 constitute a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         primer set (#2) used in an exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;
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DB 1; Length 20; 0.8%; Score 14.2; DB 1; 84.2%; Pred. No. 8.7e+02; ative 0; Mismatches 3. 502 CCTGAGGGCTACCTGGAGA 520 16; Conservative Query Match Best Local Similarity Matches

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Gaps .; 0

3; Indels

cereaddecreeredada 2 AAC62964 standard; DNA; 20 BP 20 RESULT 1003 AAC62964/ g

JNK antisense oligonucleotide ISIS #21867. (first entry) 06-FEB-2001 

cellular hyperproliferation, Alzheimer's, Parkinson's disease, amylotrophic lateral sclerosis, retinitis, pigmentosa, epilepsy, myocardial infarction, stroke, obstructive jaundice, polycystic kidney, Antisense, gene therapy, JNK2 protein; apoptosis; cancer; diabetes; Jun N-terminal kinase; ss

Homo sapiens

WO200059549-A1.

12-OCT-2000.

04-APR-2000; 2000WO-US008880

99US-00287796 07-APR-1999;

(ISIS-) ISIS PHARM INC.

Gaarde WA; Nero PS, Monia BP, Dean NM, Mckay R,

WPI; 2000-638427/61

Novel methods for reducing apoptosis comprising contacting cells with antisense oligonuclectides, useful for treating apoptotic disorders, e.g. cancer.

Example 8; Page 150; 160pp; English.

The present invention relates to antisense oligonucleotides (AAC62844-C63000, AAA66093-A96099 and AAA07993) that hybridise specifically to a nucleotide encoding a Jun N-terminal kinase (JNK2) protein, resulting in decrease of JNK2 expression and leading to induction of apoptosis. The present sequence is one such antisense oligonucleotide. The oligonucleotides of the present invention are useful for treating diseases or conditions with reduced apoptosis, e.g. cancer and cellular hyperproliferation. The oligonucleotides may also be used to increase the stimulation of apoptotic proteins, e.g. for treating Alzheimer's or

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0
         igmentosa, epilepsy, myocardial infarction, stroke, obstructive aundice, polycystic kidney and diabetes. The present sequence may have a
                                                                                       Gaps
                                                                                      0
Parkinson's disease, amylotrophic lateral sclerosis, retinitis,
                                                                Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                Seguence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other,
                                                                                                                                                                                                                                                       PCR primer; fungal infection; pathogen spread; internal transcribed spacer; ITS; ss.
                                                                                                                                                                                                                                     PCR primer ITS2 used for fungal detection.
                                                                                                                                                                                                                                                                                                                                                                                   (NOVS ) NOVARTIS AG. (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH
                                                                                                         1424 GGATCTCCGCAGAGGATGC 1442
                                                                                                                           GGATCTCCGTAGACGAAGC 2
                                                                   0.8%;
                                                                                                                                                                                                                                                                                                                                               28-FEB-2000; 2000WO-EP001625.
                                                                                                                                                                                                                                                                                                                                                                 01-MAR-1999; 99US-00258967
                                                                                                                                                                          AAA94772 standard; DNA; 20
                                                                                                                                                                                                                 (first entry)
                            phosphorothicate backbone
                                                                                      16; Conservative
                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                 Beck JJ, Perry CV;
                                                                                                                                                                                                                                                                                                        WO200052202-A2.
                                                                                                                                                                                                                 19-JAN-2001
                                                                                                                                                                                                                                                                                     Unidentified
           pigmentosa,
                                                                                                                                                                                                                                                                                                                            08-SEP-2000.
                                                                                                                            20
                                                                                                                                                                                               AAA94772;
                                                                   Query Match
Best Local S
                                                                                                                                                         RESULT 1004
                                                                                      Matches
                                                                                                                                                                  AAA9477
88888888
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ö The present sequence is a PCR primer which can be used for fungal pathogen detection especially Monilinia laxa or M. fructicola. This sequence may be used to amplify DNA isolated from a plant leaf infected with a pathogen via PCR. The resulting PCR product may then be detected via standard methods. Use of the present sequence for detecting fungal pathogens provides a detailed information on the developments and spread of specific pathogen races over extended geographical areas and further provides a method of detection especially suitable for diseases with a long latent phase. The present sequence is derived from fungal Internal Transcribed spacer (ITS) sequence of the ribosomal RNA gene 5.8S Gaps 0 0.8%; Score 14.2; DB 1; Length 20; 14.2%; Pred. No. 8.7e+02; ve 0; Mismatches 3; Indels Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other; 1549 CTTCGGTCTTCGTCGATGC 1567 84.2%; 16; Conservative Local Similarity Query Match Matches à g

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crecerrerrearcearec

pathogen

Use of an oligonuclectide primer for identification of a fungal pa especially Monilinia laxa or M. fructicola, comprises a nucleotide

sequence having defined base pairs. Example 5; Page 12; 22pp; English.

WPI; 2000-579293/54

Lander

Ireland JS,

g

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Nucleic acid selected from one of 106 genes comprising single nucleotide polymorphisms, allele-specific oligonucleotides to the genes are useful for phenotypic correlations, forensics, paternity testing, medicine and genetic analysis.
                                                                                                                      (WHED ) WHITEHEAD INST BIOMEDICAL RES. (AFFY-) AFFYMETRIX INC.
                                                                                                                                                          Cargill M, Daley
Patil N, Sklar P;
                                                                                                                                                                                                                                                                                 Claim 8; Fig 5; 214pp; English.
                                                                     30-MAR-2000; 2000WO-US008440.
                                                                                               99US-0127248P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC72320 standard; DNA;
                                                                                                                                                                                               WPI; 2000-611722/58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
es 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200058519-A2
                       WO200058519-A2
                                                                                                                                                          Altshuler D,
Lipshutz RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-MAR-1999;
Homo sapiens.
                                                                                               31-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-CT-2000.
                                               05-0CT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAC72320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Single nucleotide polymorphism; SNP; human; genetic disease; disease susceptibility; cardiovascular system; endocrine system; neurological system; forensic testing; paternity testing; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence is a PCR primer which can be used for fungal pathogen detection especially Monilinia laxa or M. fructicola. This sequence may be used to amplify DNA isolated from a plant leaf infected with a pathogen via PCR. The resulting PCR product may then be detected via standard methods. Use of the present sequence for detecting fungal pathogens provides a detailed information on the developments and spread of specific pathogen races over extended geographical areas and further provides a method of detection especially suitable for diseases with a long latent phase. The present sequence is derived from fungal Internal Transcribed spacer (ITS) sequence of the ribosomal RNA gene 5.8S
                                                                                                                                                                                                                                                                                                                                                                                   Use of an oligonucleotide primer for identification of a fungal pathogen especially Monilinia laxa or M. fructicola, comprises a nucleotide sequence having defined base pairs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.2; DB 1; Length 20;
Pred. No. 8.7e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Single nucleotide polymorphism PCR primer #1427.
                                                                                                                                     PCR primer; fungal infection; pathogen spread; internal transcribed spacer; ITS; ss.
                                                                                                                                                                                                                                                                                                 (NOVS ) NOVARTIS AG. (NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
                                                                                                             PCR primer ITS3 used for fungal detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 5; Page 12; 22pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                crecerrerrearcearee 1
                                     AAA94773 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.8%;
                                                                                                                                                                                                                                                   28-FEB-2000; 2000WO-EP001625
                                                                                                                                                                                                                                                                        99US-00258967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAC72311 standard; DNA; 20
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                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-579293/54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                      Perry CV;
                                                                                                                                                                                                  WO200052202-A2
                                                                                                                                                                         Unidentified.
                                                                                                                                                                                                                                                                          01-MAR-1999;
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                                                                                       19-JAN-2001
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                                                                                                                                                                                                                                                                                                                                      Beck JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1006
               RESULT 1005
                         AAA94773
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The present invention is concerned with a number of human single nuclectide polymorphisms (SNPs) which the inventors identified in human genes. These SNPs can be used in disease diagnosis and prediction of an individual's susceptibility to disease, in forensic and paternity testing and in genetic mapping. In particular, the SNPs of the invention can be used to diagnose susceptibility to diseases of the cardiovacular, endocrine and neurological systems, such as coronary artery disease, echizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Single nucleotide polymorphism; SNP; human; genetic disease; disease susceptibility; cardiovascular system; endocrine system; neurological system; forensic testing; paternity testing; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.8%; Score 14.2; DB 1; Length 20; llarity 84.2%; Pred. No. 8.7e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Single nucleotide polymorphism PCR primer #1433.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (WHED ) WHITEHEAD INST BIOMEDICAL RES. (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1449 ACATCCATTCTTCCTCAGT 1467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACATCCATACTGCCTGAGT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-MAR-2000; 2000WO-US008440.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-0127248P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        70
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The present invention is concerned with a number of human single nucleotide polymorphisms (SNPs) which the inventors identified in human genes. These SNPs can be used in disease diagnosis and prediction of an individual's susceptibility to disease, in forensic and paternity testing and in genetic mapping. In particular, the SNPs of the invention can be used to diagnose susceptibility to diseases of the cardiovascular,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Single nucleotide polymorphism; SNP; human; genetic disease; disease susceptibility; cardiovascular system; endocrine system; neurological system; forensic testing; paternity testing; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic acid selected from one of 106 genes comprising single nucleotide polymorphisms, allele-specific oligonucleotides to the genes are useful for phenotypic correlations, forensics, paternity testing, medicine and
                                                                         Nucleic acid selected from one of 106 genes comprising single nucleotide polymorphisms, allele-specific oligonucleotides to the genes are useful for phenotypic correlations, forensics, paternity testing, medicine and
                                                                                                                                                                                                                                                                             endocrine and neurological systems, such as coronary artery disease, schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                          .
0
 Lander ES;
                                                                                                                                                                                                                                                                                                                                                                          0.8%; Score 14.2; DB 1; Length 20;
84.2%; Pred. No. 8.7e+02;
iive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lander
 Ireland JS,
                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Daley GQ, Ireland JS, Sklar P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Single nucleotide polymorphism PCR primer #1417.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (WHED ) WHITEHEAD INST BIOMEDICAL RES (AFFY-) AFFYMETRIX INC.
Daley GQ,
Sklar P;
                                                                                                                                                                                                                                                                                                                                                                                                                                         1449 ACATCCATTCTTCCTCAGT 1467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACATCCATACTGCCTGAGT 20
                                                                                                                                                       Claim 8; Fig 5; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-MAR-2000; 2000WO-US008440.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-0127248P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAC72296 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cargill M,
Patil N, S
                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
 Cargill M,
Patil N, 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-611722/58.
                                             WPI; 2000-611722/58
                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
les 16; Conserv
                                                                                                                           genetic analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200058519-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Altshuler D,
 Altshuler D,
Lipshutz RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lipshutz RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N
                                                                                                                                                                                                                                                                                                                                                                             Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1008
                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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The present invention is concerned with a number of human single

Claim 8; Fig 5; 214pp; English

genetic analysis.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Producing adult mammalian central nervous system (CNS)-derived progenitor cells or adult mammalian CNS-derived stem cells from adult mammalian CNS tissue for the treatment of opthalmic disorders.
nucleotide polymorphisms (SNPs) which the inventors identified in human genes. These SNPs can be used in disease diagnosis and prediction of an individual's susceptibility to disease, in forensic and paternity testing and in genetic mapping. In particular, the SNPs of the invention can be used to diagnose susceptibility to diseases of the cardiovascular, endocrine and neurological systems, such as coronary artery disease, schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nervous system; CNS; buoyancy-based separation; rat;
                                                                                                                                                                                                                                0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Takahashi M;
                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                            Score 14.2; DB 1; Length
Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seguence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                           Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Takahashi J,
                                                                                                                                                                                                                                0; Mismatches

    primer used to amplify rat trkB RNA.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 5; Page 29; 52pp; English.
                                                                                                                                                                                                                                                                  1449 ACATCCATTCTTCCTCAGT 1467
                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Safar FF,
                                                                                                                                                                                                                                                                                                                                                                                          ВР
                                                                                                                                                                                          0.8%;
                                                                                                                                                                                                                                                                                      2 ACATCCATACTGCCTGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-0119642P.
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                                                                                                                                                                                                                                                                                                                                                                                          AAA90638 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                              16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Palmer T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-558212/51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dystrophy; trkB; ss
                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Primer; central
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200047718-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-FEB-1999;
24-SEP-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rattus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                            AAA90638;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gage FH,
                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                       RESULT 1009
                                                                                                                                                                                                                                Matches
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anti-viral therapy; stereochemical pathway;

(first entry)

'note= "All bases are phosphorothioate"

OTHER

pase=

Ω

\*tag=

Location/Qualifiers

/mod\_base= OTHER /note= "Modified with 2'-methoxyethyl"

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/\*tag=

/\*tag= c /label= RNA

/\*tag= e /label= RNA

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11-JAN-2000; 2000US-00481486
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                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-407218/43.
                                                                           Phosphorothioate; a
DNA-RNA hybrid; ss.
                                                      Oligonucleotide #6.
                                                                                                                                            modified base
                                                                                                                                                                                       modified base
                                                                                                                                                                                                                                                                                                  modified base
                                                                                                                                                                                                                                                                                                                                                                                                                       15-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                        US6242591-B1
                                 14-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                              05-JUN-2001.
                                                                                                            Synthetic
           AAH46457;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cole DL,
                                                                                                                                                                                                                                  misc_RNA
                                                                                                                                                                                                                                                                 misc RNA
  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The sequence is a sequencing primer for nucleic acids encoding Mouse antibody heavy chains CC92VH and B72.3, which can form chimaeric antibody molecules of the invention. The invention concerns chimaeric antibody heavy chains or their chimaeric antibody. The binding fragment which have the ability to combine with anti-TAG-72 antibody light chain to form a binding site having an affinity for TAG-72 which is at least 25% greater than that of B72.3 (an antibody known to the prior art). TAG-72 is a human tumour antigen thought to be a mucin glycoprotein. DNA sequences encoding the chimaeric heavy chains are useful for producing antibodies that are useful for cancer treatment, such as in vivo diagnostic assays, in vivo therapy and radioinmunoquided surgery. The antibodies produce significantly fewer side-effects when administered to human patients
                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel DNA sequence encoding chimeric antibody heavy chain or its chimeric antigen-binding fragment, useful for cancer treatment, such as in vivo diagnostic assays, in vivo therapy and radioimmunoguided surgery.
                                                                                                                                                                                     antibody; TAG-72; mucin; chimaeric heavy chain; B72.3; tumour; radioimmunoguided surgery; sequencing primer; ss; B72.3/CC92 HC.
 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                Mouse immunoglobulin heavy chain sequencing primer B72.3/CC92 HC.
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Pred. No. 8.7e+02;
0; Mismatches 3; Indels
 Indels
                                                                                                                                                                                                                                                                                                                                                                                       Kaplan DA;
3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 4 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                       Schlom J,
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                      Rixon MW,
                    834 CCTTGTCTTTGAGTACCTG 852
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example; Col. 34; 120pp; English
                                                                                               AAS03547 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                          88US-00259943.
88US-00261942.
89US-00424362.
93US-00040687.
                                         19 CATGGTCTTTGAGTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.8%;
                                                                                                                                                                                                                                                                                      95US-00479285
                                                                                                                                           (first entry)
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                      Gourlie BB,
                                                                                                                                                                                                                                                                                                                                                                (DOWC ) DOW CHEM CO.
                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-298946/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                           US6207815-B1.
                                                                                                                                                                                                                                                                                                                                                                                                 Anderson WHK;
                                                                                                                                                                                                                                                                                     07-JUN-1995;
                                                                                                                                                                                                                                                                                                                      24-OCT-1988;
19-OCT-1989;
                                                                                                                                                                                                                                                                                                           19-OCT-1988;
                                                                                                                                                                                                                                                                                                                                            31-MAR-1993;
                                                                                                                                           29-AUG-2001
                                                                                                                                                                                                                                                                27-MAR-2001.
16;
                                                                                                                                                                                                                                                                                                                                                                                      Mezes PS,
                                                                                                                     AAS03547;
                                                                                                                                                                                     Mouse;
                                                                         RESULT 1010
                                                                                                                                                                                                                       Wus sp
Matches
                                                                                      AAS03547,
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/\*tag= d /mod\_base= OTHER /note= "Modified with 2'-methoxyethyl"

Cheruvallath ZS;

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0
                                                                                                                                                                                    The present invention relates to a method for preparing phosphorothioate oligonucleotides having at least one nucleoside with a 2' modification. The method comprises phosphitylating the 5'-hydroxyl of a nucleic acid group having at least one nucleoside with a 2' modification in an acetonitrile. The present sequence was used to illustrate the method of the present invention. The method is useful for synthesising sulphurised 2' substituted phosphorothioate oligonucleotides, which may be used in molecular biological research, in applications such as anti-viral therapy, and for determining the stereochemical pathways of certain
Preparing sulfurized 2' substituted phosphorothioate oligonucleotides useful in biological research, comprises phosphitylating the 5'-hydroxyl of a nucleic acid having a nucleoside with a 2' modification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.2; DB 1; Length 20; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 0 A; 6 C; 4 G; 4 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              enzymes which recognise nucleic acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGATGAAGAAGATCAAACG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 GCAAGAAGAAGAGCAAACG 2
                                                                                                                            Example 9; Col 6; 7pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
es 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Si
Matches 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     131
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1293 GICCAACGAGGAGTICAAG 1311

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GTACAATGAGAAGTTCAAG

20

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AAH46457 standard; DNA; 20 BP.

RESULT 1011 AAH46457/c ID AAH4645'

Synthetic

(CNSJ ) (UYIS-) (UYVA-) (

(CARO-)

AAH44591;

RESULT 1012 AAH44591

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The present invention describes a method for differentiating between seeds of Cyamopsis tetragonoloba (guar) and Ceratonia siliqua (locust bean) from differences in TDA extracted from them. The seeds are can bean) from differences in TDA extracted from them. The seeds are can be considered by the stranger of the section (PCR) using the TDNA-specific primer pairs ITS5/ITS2 (flanking the ITS (intervening transcribed spacer) I region) and ITS3/ITS4 (flanking the ITS ITS2 region). The amplicons are then detected. Also described are: (1) the detection of guar gum, individually or mixed with locust bean gum, by extraction of DNA, amplification by PCR and detecting amplicons corresponding to guar; and (2) extraction differentiate between guar and locust bean gum. The gumes are used to differentiate between guar and locust bean seeds (or their derived gume), e.g. to confirm authenticity of guar gum. The gumes are used as thickeners, gelling agents and stabilisers in foods. The specified primers provide selective identification of the different seeds. The present sequence represents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Internal transcribed spacer; ITS; PCR primer; 5.8s rDNA; fungal pathogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Differentiating between guar and locust bean seeds, or derived gums, by amplifying specific, characteristic regions of ribosomal DNA.
                                                                                                                  Guar gum; locust bean gum; detection; plant; initiator; amplification; PCR; Cyamopsis tetragonoloba; Ceratonia siliqua; thickener; gelling agent; food stabiliser; differentiation; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hernandez Viadel ML;
JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 0.8%; Score 14.2; DB 1; Length 20; Best Local Similarity 84.2%; Pred. No. 8.7e+02; Matches 16; Conservative 0; Mismatches 3; Indels
                                                                    Guar and locust bean seed differentiation PCR primer ITS2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Internal transcribed spacer, ITS, PCR primer ITS2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CNSJ ) CONSEJO SUPERIOR INVESTIGACIONES CIENTIF.
(UYIS-) UNIV LAS ISLAS BALEARES.
(UYVA-) UNIV VALENCIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the ITS5 PCR primer from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Domenech Sanchez A,
Rossello Picornell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Crecerrericardarde 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Fig 1; 44pp; Spanish.
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                                                                                                                                                                                                                                                                                                                                                                                        02-MAR-2001; 2001WO-ES000079.
                                                                                                                                                                                                                                                                                                                                                                                                                                           08-MAR-2000; 2000ES-00000560.
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                     (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Benedi Benito VJ,
Alberti Serrano S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UYVA-) UNIV VALI
(CARO-) CAROB SA
                                                                                                                                                                                                                                                                                   WO200166794-A1.
                     01-NOV-2001
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                                                                                                                                                                                                                                  Synthetic
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes a method for differentiating between seeds of Cyamopsis tetragonoloba (guar) and Ceratonia siliqua (locust bean) from differences in rDNA extracted from them. The seeds are germinated, DNA extracted and amplified by polymerase chain reaction (PCR) using the rDNA-specific primer pairs ITS5/ITS2 (flanking the ITS2 (intervening transcribed spacer) I region) and ITS3/ITS4 (flanking the ITS2 region). The amplicons are then detected. Also described are: (1) the detection of guar gum, individually or mixed with locust bean gum, by carraction of DNA, amplification by PCR and detecting amplicons corresponding to guar; and (2) extraction of DNA from guar gum and/or locust bean seeds (or their derived gums), e.g. to confirm authenticity court bean seeds (or their derived gums), e.g. to confirm authenticity cataonissers in foods. The specified primers provide selective identification of the different seeds. The present sequence represents
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Differentiating between guar and locust bean seeds, or derived gums, by amplifying specific, characteristic regions of ribosomal DNA.
                                                                                                                                                                                                                                                                                Guar gum; locust bean gum; detection; plant; initiator; amplification; PCR; Cyamopsis tetragonoloba; Ceratonia siliqua; thickener; gelling agent; food stabiliser; differentiation; PCR primer; ss.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Benedi Benito VJ, Domenech Sanchez A, Hernandez Viadel ML;
Alberti Serrano S, Rossello Picornell JA;
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84.2%; Pred. No. 8.7e+02;
cive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                  Guar and locust bean seed differentiation PCR primer ITS3.
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UNIV LAS ISLAS BALEARES.
UNIV VALENCIA.
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                                                                         AAH44591 standard; DNA; 20 BP.
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                                                                                                                                                                                 (first entry)
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Gaps

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Query Match

 $\ddot{o}$ g AAH44593

RESULT 1013
AAH44593
ID AAH4459:
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AC AAH4459:

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The sequence is a PCR primer used to amplify the internal transcribed spacer (ITS) from the 5.8s rDNA gene of wheat fungal pathogens. The ITS DNA sequences are useful for detecting Rhizoctonia cerealis, a fungal pathogen of wheat causing Sharp eyespot, for monitoring disease development in plant population, and for providing detailed information on the development and spread of specific pathogen races over extended geographical areas. The DNA sequences are specifically used as primers in PCR-based analysis for the identification of fungal pathotypes
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Detecting and identifying fungal pathogens, especially Candida, cryptococcus and Aspergillus, comprises hybridizing the amplified nucleic acid of the fungal pathogen with a probe from the internal transcribed spacer region of a DNA.
New internal transcribed spacer DNA sequences, useful for identifying fungal pathogen, particularly Rhizoctonia cerealis, and for monitoring disease development in plant population.
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                                                                                                                                                                                                                                                                                                                                                                                                                  3; Indels
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                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
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                                                                                       Example 6; Page 16; 35pp; English.
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The sequence is a PCR primer used to amplify the internal transcribed spacer (ITS) from the 5.8s rDNA gene of wheat fungal pathogens. The ITS DNA sequences are useful for detecting Rhizoctonia cerealis, a fungal pathogen of wheat causing Sharp eyespot, for monitoring disease development in plant population, and for providing detailed information on the development and spread of specific pathogen races over extended geographical areas. The DNA sequences are specifically used as primers in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Internal transcribed spacer; ITS; PCR primer; 5.8s rDNA; fungal pathogen; wheat disease; Sharp eyespot; fungal pathotype identification; ss; ITS3.
  wheat disease; Sharp eyespot; fungal pathotype identification; ss; ITS2
                                                                                                                                                                                                                                                                                                                                                                                                              fungal pathogen, particularly Rhizoctonia cerealis, and for monitoring disease development in plant population.
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84.2%; Pred. No. 8.7e+02;
tive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                         (SYGN ) SYNGENTA PARTICIPATIONS AG.
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                                            Synthetic.
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                                                                                                                                                                                                                                                                                                    Beck JJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Beck JJ,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Detecting and identifying fungal pathogens, especially Candida, Cryptococcus and Aspergillus, comprises hybridizing the amplified nucleic acid of the fungal pathogen with a probe from the internal transcribed spacer region of a DNA.
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carinii. The method is especially useful in the detection of opportunistic infections in patients with impaired immunity systems, as as organ transplants patients, patients receiving intensive anticancer treatments, diabetics or AlDS patients
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(IRBI-) ENTERPRISE IRELAND T/A BIORESEARCH IRELA.
                                                                                                                                                                Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
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Pred. No. 8.7e+02;
0; Mismatches 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Smith T, Maher M, Martin C,
                                                                                                                                                                                                                              0.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-MAY-2000; 2000WO-EP004714.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99EP-00870109
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAC91162 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                  Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-061555/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fungal pathogenic;
opportunistic infec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200073499-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-JUN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1017
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The invention relates to a method for the detection of an abnormal allele

of the human interferon regulatory factor-1 (IRF-1) gene. The abnormal

allele (AAH46293) is present in PLC/PRF/5 liver cancer cells and contains

a for A substitution at position 196 of the IRF-1 promoter region

(normal alleles given in AAH46293 and AAH46294). The abnormal allele

confers an insensitivity to the effects of interferon (IFW). In the

confers an insensitivity to the effects of interferon (IFW). In the

confers an insensitivity to the effects of interferon second as

confers an insensitivity to the effects of interferon (IFW). In the

confers an insensitivity to the effects of interferon second as

confers an insensitivity to the effects of interferon second as

confers an insensitivity to the effects of interferon as

confers an insensition is detected using procedures such as

coptionally be prepared (e.g., by PCR). The invention also discloses the

cuse of IRR-1 gene fragments as probes to detect the A polymorphism. The

method of the invention is used to genotype a patient with hepatitis C

covirus (HVV) infection in order to predict whether interferon therapy will

confers the invention of the invention to amplify wild-type and polymorphic

confers an exemplification of the invention confirming the position 196 polymorphic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                   Human, interferon regulatory factor-1; IRF-1; promoter; upstream region, gencyphing; polymorphism; hepatitis C virus; HCV infection; interferon therapy efficacy; IFM; RFLP analysis; restriction fragment length polymorphism; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Detection of abnormal human interferon regulatory factor-1 (IRF-1) gene.
                                                                                                                                                                                                                           Human interferon regulatory factor-1 (IRF-1) forward RFLP PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 14.2; DB 1; Length 20; Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 4 A; 4 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1188 GGCCACAGGCCGTCCCTC 1206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 2; Page 6; App; Japanese.
    19 crecerrerrearcearec 1
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                                                                                                      AAH46289 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99JP-00324975.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF86755 standard; DNA; 20
                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 0.8
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       site for RFLP analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-460211/50.
                                                                                                                                                                                                                                                                                                                                                                                                                    JP2001136973-A.
                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-NOV-1999;
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                                                                                                                                                                                       25-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-MAY-2001.
                                                                                                                                                AAH46289;
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ID AAF8
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Gaps

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0.8%; Score 14.2; DB 1; Length 20; 34.2%; Pred. No. 8.7e+02; lve 0; Mismatches 3; Indels

84.28;

Best Local Similarity 84.2 Matches 16; Conservative

Query Match

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Gaps

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(ISIS-) ISIS PHARM INC.
                                                                                                    WPI; 2001-335680/35,
                                                                                                                                                                   especially cancer
                                                                        WO200130361-A1
                                     modified base
                                              modified base
                                                          modified base
                              Homo sapiens
                                                                                      27-0CT-1999;
    25-JUL-2001
                                                                                               Bennett CF,
                                                                            03-MAY-2001
                                                                                                                rejection.
AAF86755;
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The present invention relates to a method for the detection of the 168/J32RNA spacer region of Pseudomonas putida (see AAL69774). The method can be used to detect Pseudomonas bacteria. The present sequence is a PCR primer which was used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          citrus fruit;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ribosomal RNA gene; rRNA gene; internal transcribed spacer; ITS; pathogenic; non-pathogenic; citrus blackspot disease; citrus fru differentiation; characterisation; detection; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                Bacterium detection; 16S/23SrRNA spacer region; PCR primer; ss.
  Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rRNA gene ITS2 reverse PCR primer, SEQ ID NO:6.
                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 14.2; DB 1; Length Pred. No. 8.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
  Score 14.2; DB 1;
Pred. No. 8.7e+02;
                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Detection method of Pseudomonas bacteria.
                                                                                                                                                                                                                                                                                                                                                                                      16S/23SrRNA spacer region PCR primer #3.
                                                                                           993 GAACCTGCTCATCAACGAG 1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 9; Page 8; 11pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        48 ACCAGCAGTGTGACTGCTG 66
                                                                                                                                       GAACCGGGGCATCAACGAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N
                                                                                                                                                                                                                                                     BP
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0.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.8%;
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                                                                                                                                                                                                                                                   AAI69777 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAH73769 standard; DNA; 20
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(first entry)
                                              Conservative
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nes 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Guignardia citricarpa.
Guignardia citricarpa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-605311/69
                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pseudomonas putida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JP2001190279-A.
                                              16;
                                                                                                                                                                                                                                                                                                                                              13-DEC-2001
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08-OCT-2001
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                                                                                                                                                                                                                                                                                                AA169777;
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  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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                                              Matches
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AAI69777/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleotide binding site opener, miser, and ARF exchange factor) is localised to the plasma membrane and promotes guantne nucleotide exchange on ARF1, ARF3 and ARF6, the latter of which regulates the assembly of the actin cytoskeleton. Through its interaction with ARF6, and in conjunction with protein kinase C, cytohesin-2 functions as a critical link between cell surface receptors and the actin cytoskeleton. The oligonucleotides of the invention are useful for diagnosis, prevention and treatment of conditions associated with cytohesin-2 expression, such as atherosclerosis, allograft rejection and hyperproliferative disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense compounds modulating expression of human cytchesin-2 useful for diagnosis, prophylaxis and treatment of diseases associated with expression of cytchesin-2, e.g. cancer, atherosclerosis, allograft
                                                                                                                            mSec7; ARF exchange factor; cytosolic adapter protein;
quantine nucleotide exchange factor; ADP ribosylation factor; ARF1; ARF3;
ARF6; actin cytoskeleton regulation; expression inhibition;
atherosclerosis; allograft rejection; hyperproliferative disorder;
cancer; tumour; phosphorothioate; antisense oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE cytosines are 5-methylcytosine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        human cytohesin-2 gene, which inhibit its expression. A series of objection of ARR66597-ARR86776) were designed to target different regions of the human cytohesin-2 RNA, and were analysed for their effect on cytohesin-2 mRNA levels by quantitative real-time PCR. Cytohesin-2 is a member of a small family of cytosolic adapter proteins which function as guantine nucleotide exchange factors for ADP ribosylation factors (ARRFs), small monomeric G-proteins which regulate critical vesicular traffic pathways. Cytohesin-2 (also known as PSCD2, ARNO for ARF
                                                                                                         cytohesin-2; PSCD2; ARNO for ARF nucleotide binding site opener;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to antisense oligonucleotides targetted to the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (2'-MOE) nucleotides. All
                                                               Human cytohesin-2 antisense oligonucleotide, SEQ ID NO:68.
                                                                                                                                                                                                                                                                                                                                                                                                           note= "Phosphorothicate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seguence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "2'-methoxyethyl (2'-MOF
cytosines are 5-methylcytosine'
                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 3; Page 80; 104pp; English.
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/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                    'mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod base= OTHER
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                       (first entry)
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Gaps

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Ribosomal RNA gene; rRNA gene; internal transcribed spacer; ITS; non-pathogenic; citrus blackspot disease; citrus fruit; differentiation; characterisation; detection; PCR primer; ss.
                                                                                                          Claim 5; Page 18; 33pp; English
                                                                                                                                                                                                                                                                                                                                    AAH73770 standard; DNA; 20 BP
                                       19-JAN-2000; 2000US-0177013P.
                          19-JAN-2001; 2001WO-US001735
                                                                                                                                                                                                                                                                                 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                Guignardia citricarpa.
                                                  (UYOR-) UNIV OREGON
                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                           WO200153318-A2
    WO200153318-A2.
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08-OCT-2001
                26-JUL-2001
                                                              Carroll GC
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The invention relates to oligonucleotide amplification primers and methods for the detection of pathogenic Guignardia citricarpa. Guignardia citricarpa is a fungus which causes citrus blackspot disease, producing progressive black surface lesions on the fruits of most commercial citrus cultivars such as oranges, lemons, limes, and grapefruit. Although this cultivars such as oranges, lemons, limes, and grapefruit. Although this is a cosmetic disease, it causes significant losses to the citrus fruit caffected fruit. However, there is a second, non-pathogenic Guignardia citricarpi, which also infects citrus fruit, but which forms insignificant leak-ons. This non-pathogenic Guignardia species is morphologically almost indistinguishable from the pathogenic Guignardia citricarpa, and both species may be simultaneously present on caranactibed spacer (ITS) regions of the ribosomal RNA gene of either the transcribed spacer (ITS) regions of the ribosomal RNA gene of either the guignardia citricarpa (see AAH73768). These regions exhibit significant differences between the two species, and provides a means by which the two species may be distinguished from one other. The present sequence two species may be distinguished from one other. The present sequence the non-pathogenic Guignardia citricarpa (see AAH73768). (Updated on 06-AUG-2003 to
                                                                                                                                                                                                                                                                                                                                                         New differentiating oligonucleotides which hybridizes with a target DNA sequence associated with pathogenic or non-pathogenic species of Guignardia, for differentiating pathogenic from non-pathogenic species.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.8%; Score 14.2; DB 1; Length 20;
14.2%; Pred. No. 8.7e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Phytophthora infestans; potato; tomato; infection; ITS; internal transcribed spacer; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Phytophthora infestans ITS PCR primer ITS3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example I; Page 19; 33pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19 CTGCGTTCTTCATCGATGC 1
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                                                                                                                                   19-JAN-2000; 2000US-0177013P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 84.2%;
Matches 16; Conservative
                                                                               19-JAN-2001; 2001WO-US001735.
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                                                                                                                                                                                                                                                                                                     WPI; 2001-465362/50.
                                                                                                                                                                                              (UYOR-) UNIV OREGON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-SEP-2002
                          26-JUL-2001
                                                                                                                                                                                                                                                   Carroll GC;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1023
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to oligonucleotide amplification primers and methods for the detection of pathogenic dugmardia citricarpa. Suggrandia citricarpa is a fungus which causes citrus blackspot disease, producing citricarpa is a fungus which causes citrus blackspot disease, producing citricarpa is a fungus which causes citrus blackspot disease, producing cultivars such as oranges, lemons, limes, and grapefruit. Although this cis a cosmetic disease, it causes significant losses to the citrus fruit growing industry, as many countries do not permit the importation of faffected fruit. However, there is a second, non-pathogenic Guignardia species, Guignardia citricarpi, which also infects citrus fruit, but which forms insignificant lesions. This non-pathogenic Guignardia species is morphologically almost indistinguishable from the pathogenic configuration cone fruit. The primers of the invention are targetted to the internal cranscribed spacer (ITS) regions of the ribosomal RNA gene of either the pathogenic Guignardia citricarpa (see AAH73767) or the non-pathogenic consecuts a reverse PCR primer which can be used to amplify the rRNA gene ITS regions of both the pathogenic Guignardia citricarpa and the non-pathogenic Guignardia citricarpi. (Updated on 06-AUG-2003 to correct OS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·
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                                                                                                                                                                                                                                                                                                                                                                                                                       New differentiating oligonucleotides which hybridizes with a target DNA sequence associated with pathogenic or non-pathogenic species of Guignardia, for differentiating pathogenic from non-pathogenic species.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Guignardia citricarpi rRNA gene ITS3 forward PCR primer, SEQ ID:7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to oligonucleotide amplification primers and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.8%; Score 14.2; DB 1; Length 20;
84.2%; Pred. No. 8.7e+02;
tive 0; Mismatches 3; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11 11 11111 | 11111| CTGCGTTCTTCATCGATGC 20
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(first entry)
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Gaps

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20-JUN-2000; 2000KR-00033967.

KR2002000043-A.

04-JAN-2002

with

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hyperproliferative disorder; cancer; blood disorder; stroke;
brain injury; neurodegenerative disease; infection; inflammation; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Caspase 2; antisense; cytostatic; osteopathic; cerebroprotective; neuroprotective; antilipemic; antiinflammatory; antimicrobial; haematopoietic disorder; bone metabolism disorder; cholesterol disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= m5c, OTHER
/note= "Nucleotides 1-5 and 16-20 are five-nucleotide
wings consisting 2'methoxyethy1 (2'-MOB) nucleotides,
15 are 2'deoxynucleotides, backbone linkages are
phosphodiester, all cytosines are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                               Human caspase 2 antisense inhibitor oligonucleotide #26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                             1549 CTTCGGTCTTCGTCGATGC 1567
                                                                                                     Disclosure; Fig 1; 9pp; Korean.
 20-JUN-2000; 2000KR-00033967.
                                                                                                                                                                                                                                                                                                                                                                    ABN74847 standard; DNA; 20 BP
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                    (UYKA-) UNIV KANGWON.
                                                            WPI; 2002-441747/47.
                                                                                                                                                                                                                                                              Best Local Similarity
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                                         Lee YS;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         modified base
                                                                                                                                                                                                                                                                        16;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
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                                                                                                                                                                                                                                                    Query Match
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                                         Kim GS,
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Sequence 20 BP; 5 A; 4 C; 9 G; 2 T; 0 U; 0 Other;

oligonucleotides

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The invention relates to a compound 8-50 nucleobases in length targeted to a nucleic acid molecule encoding caspase 2, which specifically hybridises with and inhibits the expression of caspase 2, or specifically thybridises with and inhibits the expression of an active site on a nucleic acid molecule encoding caspase 2. The activity of antisense of nucleic acid molecule encoding caspase 2. The activity of antisense of orligonucleotides of the invention may be described as, cytostatic, osteopathic, cerebroprotective, neuroprotective, antilipemic, antilinflammatory and antimicrobial. The antisense compounds are useful for tracating an animal having a disease or condition associated with caspase 2, such as haematopoietic disorder, bone metabolism disorder, cholesterol disorder, or a hyperproliferative disorder. These compounds the used as research reagents and diagnostics, to distinguish between functions of various members of a biological pathway, in the corresponder of caspase 2, including cancer, blood disorders, stroke, brain injury and neurodegenerative diseases. They may also be used for thought of caspase 2, including cancer, blood disorders, stroke, brain continuous formation. Records ABN74810-ABN74952 represent caspase 2 mRNA inhibitor
                                                               New antisense compounds targeted to nucleic acid molecule encoding
                                                                                             caspase 2, useful for treating diseases or conditions associated veaspase 2, e.g. cancer, blood disorders, stroke, brain injury and neurodegenerative diseases.
                                                                                                                                                                                                                            Claim 3; Page 99; 146pp; English.
WPI; 2002-351998/38.
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                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a DNA marker for detecting Phytophthora mifestans in potato and tomato, useful for specifically detecting a small amount of Phytophthora infestans DNA and diagnoshing the infection of Phytophthora infestans in potato and tomato at any time. The DNA marker for Phytophthora infestans in potato and tomato is produced by extracting fer Phytophthora species, amplifying the internal transcribed spacer (ITS) II region using primers ITS3 (ABN85668) and ITS4 (ABN85669), cloning the amplified products into pGEM-T easy vector, preparing a primer PISP-1 (ABN85670) and linking the primers PISP-1 and ITS3
                                                                                                                                                                                                                                             DNA marker for detecting Phytophthora infestans in potato and tomato.
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0
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Antisense gene therapy; RAIDD; death domain; caspase recruitment domain; CARD; hyperproliferative disorder; cancer; growth disorder; mouse; metabolic disorder; infection; inflammation; tumour formation; RIP associated ICH-1/CED-3-homologous protein with death domain; receptor interacting protein; antisense oligonucleotide; ss.
                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel antisense compound that hybridizes and inhibits nucleic acid
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0
   0.8%; Score 14.2; DB 1; Length 20; 14.2%; Pred. No. 8.7e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                    Mouse RAIDD antisense oligonucleotide #14.
                                                      GGTGGTGGCGGCAGTGACC 253
                                                                               20
                                                                                                                                           ABK99760 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Watt AT;
                                                                              GGCGGTGCCAGTGAAC
                                                                                                                                                                                                                                                                                                                                                                                                   29-OCT-2001; 2001WO-US050914.
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               84.28;
                                                                                                                                                                                            (first entry)
                              Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Freier SM,
Query Match
Best Local Similarity
Matches 16; Conserv
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                                                                                                                                                                                                                                                                                                                          Mus musculus,
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                                                                                                                                ABK99760
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